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REPORT

ON THE

Health of the County Borough of Belfast for the Year 1944

BY THE

Medical Superintendent
Officer of Health

GRAHAM & HESLIP, LTD., BELFAST.

REPORT

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Health of the County Borough of Belfast

FOR THE YEAR 1944

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BY

CHAS. S. THOMSON, M.D. (Glasgow), M.R.C.P.
(Ed.), D.P.H., D.Hy. (University of Durham)
The Medical Superintendent Officer of Health for the City.

COUNTY BOROUGH OF BELFAST.

Public Health Committee
1944

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COUNTY BOROUGH OF BELFAST—1944

Summary of Vital Statistics

Area (Census 1937) (Exclusive of 1,262 acres of tidal water)	15,289 acres.
Population	430,800 (estimate of Registrar-General for N.I. as at 30th June, 1944).
Marriages	4,005
Marriage Rate	9.3 per 1,000 of the population.
Births Registered	10,456
Birth Rate	24.3
Births (notified)	12,006
Still Births (included in total births notified) ...	355
Birth Rate average for the ten years 1935-1944 ...	21.4
Deaths	5,176
Death Rate	12.0
Death Rate average for the ten years 1935-1944 ...	13.6
Deaths of Infants under one year of age ...	927
Infant Mortality Rate	89 deaths per 1,000 births.
Average for the ten years 1935-1944 ...	99 deaths per 1,000 births.
Deaths from Pregnancy, Childbirth, and the Puerperal State	24
Death Rate per total births registered ...	2.3
Deaths from Diseases or causes combined with Pregnancy and Childbirth	7
Death Rate per total births registered ...	0.7
Deaths from Epidemic Diseases	242
Death Rate from Epidemic Diseases ...	0.6
Deaths from Measles	1
Deaths from Typhoid Fever	—
Deaths from Scarlet Fever	2
Deaths from Whooping Cough	22
Deaths from Diphtheria	11
Deaths from Diarrhœa and Enteritis (under two years of age)	184
Deaths from Dysentery	1
Deaths from Influenza	21
Deaths from Tuberculosis of the Respiratory System	354
Death Rate from Tuberculosis of the Respiratory System	0.8
Deaths from Bronchitis	208
Deaths from Pneumonia	315
Deaths from Pleurisy	7
Deaths from other Diseases of the Respiratory System (Tuberculosis excepted) ...	71

To

The Right Honourable the Lord Mayor (Councillor The Right
Honourable Sir Crawford McCullagh, Bart., D.L., P.C.), and
the Aldermen and Councillors of the County Borough of Belfast.

Public Health Department,
City Hall,
May, 1945.

My Lord Mayor, Aldermen, and Councillors,

I have the honour to present to you my sixteenth Annual Report dealing with the health of the City for the year 1944. Whilst war circumstances require that all reports shall be as brief as possible, nevertheless, as this is my last annual report, it is essential that I should make some reference to certain matters of considerable import.

The prevention and control of epidemic and infectious disease is always the most pressing and urgent matter in any Health Department ; hence, in dealing with any given calendar year, a review of the incidence of infectious disease is essential.

The year under review was a satisfactory one, although scarlet fever has always been more or less prevalent. This disease is not so important nowadays, and, no doubt, more and more cases will be treated at home. In place of scarlet fever, we should take into Purdysburn cases of pneumonia, and others requiring skilled nursing and attention. A good beginning has been made in taking in selected cases of measles and whooping-cough. We should also admit dessicated cases of gastro - enteritis. Two grave infectious diseases are smallpox and typhus fever. Many years have passed since either of these diseases occurred in Belfast, and I shall say something concerning these below.

Our chief concern is with *Diphtheria.* Here is a destroyer of little children which can be wiped out by immunisation—a protection which we have offered to parents in season and out of season since 1936. Since that date, 65,049 infants and children have been immunised. In 1944, Dr. McLeod, our Staff Immunising Officer, gave the necessary protection to 6,798 children : adding to this the number dealt with at Purdysburn Fever Hospital and by private medical practitioners, we get a total of 8,428. The total number of children at risk in the city is around 120,000, and of these, some fifty-three per cent. have been immunised.

In the early days it was thought that before a fall in the incidence—the number of cases of diphtheria—could be expected in a community, some seventy-five per cent. of the children under fifteen years would have to be protected. Although the percentage in Belfast is just fifty-three, there is every evidence that this solid block of protected children has acted to some extent as a barrier against any attempted invasion of the disease : it has been a safeguard, a protection, to those not immunised, as well as to the immunised. As a consequence, the annual number of cases has fallen : time was when we received notifications running into four figures per annum, with seventy or more deaths each year. In 1944 there were one hundred and seventy-three actual cases (the notifications were rather more, but we are not averse to the notification of doubtful cases—for the child's sake—of some which prove to be tonsillitis). As regards these one hundred and seventy-three cases, nineteen had been immunised, and one hundred and fifty-four not immunised. It is generally held that around two per cent. of immunised children eventually contract the disease. Some people will never be persuaded as to the necessity for and the good results following immunisation ; presumably the discovery of penicillinand its magic carpet of cures will be a source of annoyance to these worthy folks. A study should be made of the Table given in the body of the Report on the "Age grouping of the children immunised." The point here is that, until recently, we could persuade parents to have their children, say, over five years old, immunised, but it was a difficult thing to persuade parents to have infants, aged ten months to two years, immunised. Now, diphtheria, a disease serious at all ages, is most grave between ten months and two years : the fatality-rate at that age is deplorable. At last we find, as the Table shows, that parents are now bringing along their babies to be protected : they are not waiting until it is too late.

1944, then, was a successful year for diphtheria immunisation. The good figures recorded for the one- and two-year-olds last year have been repeated, bringing the percentage of immunised children under five up to forty-five. This, together with the sixty per cent. of school children immunised, must keep a very tight rein on the prevalence of diphtheria.

The result of immunisation is its best recommendation ; repeatedly striking instances occur where diphtheria picks out the non-immunised child among immunised children in a family. The intelligent well-doing mothers see this, and these mothers make use of the clinics ; as each child reaches its first birthday, it is duly brought to be immunised, and later, when it attends school, it receives its reinforcing dose.

On the other hand, a percentage of parents cannot or will not be persuaded ; Health Visitor, schoolteacher, and doctor persistently make attempts to reduce this hard core of apathy and ignorance, and the reduced number of cases of severe diphtheria will tend to encourage apathy : this must be balanced by the constant efforts of all who have dealings with parents and children.

Those institutions which house infants and children eagerly accept immunisation, and where one hundred per cent. of the children have been immunised, diphtheria does not exist.

Cerebro-Spinal Fever

Known also as "Spotted Fever"—has deservedly an evil reputation. In large cities this disease tends to be more or less endemic, always present. In 1913 there were one hundred and sixty-three deaths in England and Wales, whilst in 1915 there were three thousand two hundred and three. Why the increase ? The disease is associated with war, with soldiers, and while a certain diplococcus is the cause, the conditions which lead to an outbreak are bad ventilation, overcrowding, and fatigue. Well do I remember 1915 : at that time I was an officer in the R.A.M.C. at Salisbury Plain. Part of my work was in connection with a military hospital for cerebro-spinal fever cases only. In those days, the death-rate from cerebro-spinal fever was high. To-day, the discovery and use in treatment of the sulphonamides has made all the difference, and the death-rate is low ; it need no longer be a terror disease. The Table herewith is self-explanatory :—

Cases of Cerebro-Spinal Fever dealt with in Purdysburn Fever Hospital.

Year	No. of Cases	Recoveries	Deaths	Case Mortality
1940	149	127	22	14.7
1941	215	195	20	9.3
1942	97	84	13	13.4
1943	54	49	5	9.2
1944	48	45	3	6.2

The sooner the case is sent into hospital, the greater the patient's chance.

Typhoid (Enteric) Fever

In the bad old days, not so long ago, typhoid fever was quite common. The disease was generally caused by infected water supplies, through downright bad sanitation or no sanitation at all. Contaminated water, that is, water infected with the typhoid germ, has been known to be used for washing milk vessels (perhaps, more rarely, for diluting milk !), and this led to spread of the disease.

Our public water supplies, to-day, are very pure, and certainly, in our district, typhoid infection from this source would be unlikely. The Belfast water supply is chlorinated ; each month a bacteriological examination is made by Professor Wilson of all the sources of water supplied by the Belfast Water Commissioners. A copy of this report is sent to me, and it is carefully scrutinised. On occasion, a communication is sent to the Water Commissioners, concerning any particular point noted in the report.

With a view to still further safeguarding the public water supply, Professor Wilson and I conferred, and it was agreed that all new employees of the Belfast Water Commissioners who worked in any way close to the water supply, fittings, etc., should be subjected to a careful medical examination, including serological tests.

To-day, medical officers are more anxious about the infection of ice-cream and milk and food generally, from the hands of "carriers" or even of mild unrecognised cases of the disease. During the last eighteen years, there have been four serious outbreaks in the City ; two of these were genuine typhoid outbursts, and the other two were of the para typhoid order. In all these cases, the person responsible for the outbreak was traced and dealt with. In 1944 only five cases of typhoid and none of para typhoid occurred in the City ; there was nothing to comment upon in connection with any of these cases.

We keep in close touch with people who have had typhoid fever. At the outset, when a case occurs in a family, we offer preventive inoculation to all the other members. When once the patient is discharged from hospital, we make examination of certain products from the body, from time to time, to ascertain whether the patient is a "carrier." Whilst only a small percentage of patients remain "carriers" for a considerable time after an attack, such people must not be allowed to take part in the preparation, sale, or handling of food or drink for public consumption. They are warned as to precautions which must be observed to safeguard the immediate family circle.

Whilst I cannot help feeling that the adoption of all these methods referred to above has been the means of safeguarding our fellows from what was once a very common and very dangerous disease, I am far from being satisfied that all necessary precautions are being taken in what may be called the Catering Industry. A Committee of Enquiry was set up, and issued a report in March, 1945, on the Catering Industry.

The "brief" of this Committee dealt with, amongst other things, the existing provisions for regulating the remuneration and conditions of employment of work-people employed in the industry. This included any part of the industry which dealt with the supply of food or drink for immediate consumption, the provision of living accommodation for guests or lodgers, or persons employed in the undertaking, and any other activity incidental thereto. It was not surprising, from this "brief," that an opportunity should be given to the Public Health Department to express its views on the health aspect, and this we did, after presenting our evidence to the Public Health Committee.

Dr. Barron, Deputy Medical Superintendent Officer of Health, gave evidence. In their report, the Committee of Enquiry said they were "much impressed by the evidence of the Medical Officer of Health of the Belfast Corporation, and they were in complete agreement with his views regarding the necessity for a periodic medical examination of all persons employed in the Catering Industry whose duties included the preparation or subsequent handling of food and drink, and the instruction in hygiene for all employees in the industry to be given in connection with a scheme for the training of staff." The Committee urged the Government to put the necessary machinery in motion to give effect to their recommendations. They asked for a Catering Services Board, and after advising such matters as the grading, licensing, and inspection of establishments and undertakings, and other matters, they dealt with the necessity for the periodic medical examination of all persons in the industry, and the establishment of a training school for chefs and cooks, etc.

What we Medical Officers are suggesting is, that we should satisfy ourselves that those who propose to take part in any department of the catering industry should themselves be, in the first place, in first-class health, or, at any rate, they should not be suffering from any disease which might be transmitted to people and to consumable goods with whom and which they are concerned. Why should Belfast lag behind New York in this matter?

I need not go into detail, but I can affirm that in the closing months of a long official life spent in the Public Health Service, I have seen the steady control and conquest of disease, resulting from taking apparently simple and common sense steps.

If these steps are taken, in a Catering Act, they will assuredly increase the comfort and happiness of humanity through the curtailment and suppression of disease. A little reflection will serve to show that there must be no delay in dealing with this matter ; it is unpleasant to think that any waiter or waitress, standing at your shoulder in a restaurant, awaiting your orders, may add a little unofficial spice to your dish in the form of a hors d'œuvre of typhoid or more ignoble germs. The prudes who express annoyance at the mention of such truths are sometimes the very people who have stood in the way of the onward march of the science of public health.

Measles

Much has been done to teach parents that measles is a dangerous disease and must not be taken lightly. The immediate dangers, namely, bronchitis and broncho-pneumonia, are stressed, whilst deafness, through injury to the hearing apparatus, and pulmonary tuberculosis, through "lighting up" of a dormant nest of the germs, the tubercle bacilli, in the lungs, are always possibilities. During 1944 we had a total of 3,048 notifications of measles, but as only the first case in a household is notifiable within a two-monthly period, many others were ascertained as they developed, by the staff at subsequent visits. There was only one death from measles, due mainly to the fact that the disease was of a mild type, but to a lesser extent to the advice and attention given by the Health Visitors (frequently cases had no doctor in attendance). When the number of notifications grew larger, it became necessary to engage two qualified visiting nurses, as part of the scheme framed under the Measles (Belfast) Regulations. Under these latter, we were able, in co-operation with medical practitioners, to supply needy cases with pneumonia jackets, malt and cod-liver oil, virol, blackcurrant purée. The serum of children convalescent from measles is reserved for the protection of sick and very young children. Where measles is introduced into a household, the toddlers, i.e., the children of pre-school age, in that family, are given a prophylactic injection, five to ten cubic centimetres of adult serum, and this reduces to a minimum the risk of complications.

Lately, another preparation has been used in America with (it is said) success : this is Cohn's globulin fraction, which contains natural antibody concentrated ten to thirty times. Within the last fourteen months, a most important memorandum was issued : this was prepared by the Medical Officers of the Ministry of Health, London. Throughout the last ten years, the London County Council has used some 366 litres of measles convalescent and adult serum obtained from over 3,000 donors for prophylactic and attenuation in its hospitals : this was given to 36,000 recipients with highly satisfactory results.

Whooping-Cough

Seven hundred and thirty-four cases of this disease were notified, and there were twenty-two deaths. Most of the deaths are due to broncho - pneumonia ; poverty, fecklessness, and poor housing have a lot to answer for. We take selected cases into Purdysburn Fever Hospital. Around ninety per cent. of the deaths occur under five years, and nearly half in the first year of life. The fact that infants under one year suffer so seriously makes the question of hospital treatment particularly difficult. Formerly, we provided the doctors with a vaccine ; about half of the doctors said it was useful, and the other half said it was useless. The success we have had following immunisation against diphtheria has led us to ask whether the same can not be done as regards whooping-cough. Experimental work has been carried out for years. Unfortunately, whereas in immunisation against diphtheria, only two injections are necessary, in whooping-cough a course of four or five is required ; this is putting a strain on mothers, and is more than the average mother is prepared to stand.

Another point is, that the first injection in whooping-cough does not yield a return in protective value equivalent to the first injection in diphtheria immunisation. For some three years, now, the two procedures, namely, immunisation against diphtheria and against whooping-cough, have been tried out in combination—a joint effort. Hopes were raised that this would solve the fears of children and apprehensions of parents, but, alas, the degree of success has only been moderate. It was found that the body did not respond well to both procedures when carried out together : it reacted to one, to the disadvantage of the other. Within the last few months, however, a new product has been introduced, alum precipitated vaccine, which involves only two injections. Provided reliable reports are received, we hope to adopt this new safeguard, after consideration of the wisest and most feasible method of its technical application alone, or in combination with diphtheria immunisation.

Smallpox

Vaccination against smallpox is compulsory in Northern Ireland, and to this must be attributed our freedom from this grave disease. I have only once encountered a case during my period of office in Belfast : this was a modified form, and it was detected on entering at the port. Dr. Fulton, Senior School Medical Officer, has supplied me with figures as to the vaccinal condition of children medically inspected in schools. The percentages vaccinated and not vaccinated were derived from a scrutiny of some nine thousand schoolchildren during routine school medical inspection in 1944. Approximately ninety-one per cent. of the children were found to be vaccinated, and nine per cent. not vaccinated.

As the Medical Officer of the City, whose duty it is to take all steps to prevent disease, I must warn your Council that if some ten per cent. of the population remains unvaccinated, we will suffer for it some day. The control of vaccination is not carried out under the authority of the Corporation. Where there is no power, there can be no responsibility. I am informed that, if defaulters are prosecuted for failing to have their children vaccinated, the fine inflicted is a small one, and this does not encourage the responsible authority, the Guardians, to prosecute. Again, it is said that medical men give exemption certificates owing to the delicacy of infants, and therefore their unfitness for vaccination.

The number of non-vaccinated children is around nine hundred a year : I cannot believe that the number of medical exemption certificates is responsible for any substantial number of these. Across the water, for several years now, the functions of the Guardians have been carried out by the various Local Authorities.

An outbreak of smallpox occurred in Edinburgh towards the end of 1942. Out of a population of 440,000, 254,000 people were vaccinated during the vaccination campaign which was promptly undertaken. This campaign checked the spread of the disease, and brought it to an end. Only eight people died of smallpox. Now, it is true that twenty-two persons suffered from post-vaccinal encephalitis, and ten of these died. The magicians, who know all the answers, promptly said, "Eight deaths from smallpox, and ten from vaccination !" "Why vaccinate? Give it up." Does it not occur to these good people that if there had been no vaccination campaign, it is safe to say that smallpox would have settled down and spread, not only in Edinburgh, but to distant parts? This would have caused widespread deaths, much loss of money, dislocation of business, and great injury to the tourist industry of the fair and lovely city. Vaccination still remains the only safeguard : the weak-kneed, the undisciplined, the doctrinaire on the soap-box, as well as some genuinely earnest people, will not agree. Well, if smallpox comes to Belfast, any who have evaded vaccination for their children may live to repent and regret their attitude.

Typhus Fever

There have been no cases during my tenure of office. The infection is conveyed from man to man by lice, hence the saying, "No lice, no typhus fever." The disease is usually associated with famine and war ; any overcrowded and insanitary conditions, leading to dirt and lousiness, favour the onset of the disease. The infection, believed to be the Rickettsia prowazeki, is found in the intestinal lining of lice taken from cases of typhus fever. The louse becomes infected by biting a typhus case, and in seven to ten days thereafter it can transmit the infection to any non-sufferer whom it bites. We keep a squad ready to deal with any case which may occur. Special clothing has been purchased to be worn by members of the team, sanitary sub-officers, nurses, etc. Contacts would receive a protective injection, and would be kept under observation for the necessary period of time—until the expiry of the incubation period.

Maternity and Child Welfare

The infantile mortality-rate for 1944 was 89 per 1,000 registered births, while the maternal mortality-rate, namely, 2.3, is fast taking its place amongst the lowest in the British Isles. Only eight years ago the rate was 6.1. This most happy result is due to a combination of factors : the Public Health Department, several years ago, began a strong campaign on behalf of ante-natal work in the City, and this has steadily developed. The advent of the new maternity hospitals—the Royal Maternity and the

Jubilee—has been a God-send to the community. Looking back over the last thirty years, I have been impressed by the conscientious work carried out by the midwives of the country. We ought to follow the lead of the Authorities across the water, and bring in the midwives as salaried officers : their conditions of work would be laid down, and a strong link would be forged with the voluntary obstetric hospitals. There are great schemes in the offing, and the Local Authorities must rise to their responsibilities and support and stimulate our excellent new Ministry of Health and Local Government, for we cannot afford to lag behind in the Public Health world.

Meanwhile, it is gratifying to find that our new services, the Flying Squad for complicated obstetrical cases, Home Helps, and the feeding of expectant women are now well established. During the year Dr. Warnock was appointed Senior Medical Officer for Maternity and Child Welfare, a most happy appointment. Dr. Warnock has been in the Department for several years, and has invariably brought to bear upon his work a high standard of scientific thought and attainment.

We have talked over the future development of the work, and now that the fifty per cent. grant is an established fact, it is felt that, with the support and sympathy of the Maternity and Child Welfare Committee, we should go ahead and develop this particular service on the lines mentioned below. Some of these may be "old sermons," but until they take effect they are worth preaching again. As I have said before, Public Health is a purchasable commodity. I have witnessed the growth of a public health conscience in the community, and the people want developments. Here, then, are our requirements, put briefly, and they are by no means final :—

MATERNITY AND CHILD WELFARE—POST-WAR PLANNING

Suggested Subjects for Consideration

Clinics

Suitable clinics require to be built to replace existing halls, which are totally unsuitable. To be economical, these clinics would have to cater for larger areas, and be used daily instead of one afternoon per week, as in the case of the existing halls. Number required for the City in the immediate post-war period should be considered.

Nurseries

One or two small resident nurseries are required for babies and small children whose mothers are unable to look after them on account of sickness or absence from home in a hospital or in a sanatorium. The need for day nurseries will, to a large extent, depend on the amount of married female employment in the City after the war. At present there are quite a number of these nurseries in the City, but most of the mothers are employed in factories engaged on war work.

Premature Infants

These constitute a large percentage of the infantile mortality, especially deaths occurring in the month immediately after birth. It is generally recognised in medical circles that special facilities are required for these infants. Probably a good many cases would require admission to a special ward for premature infants in a maternity hospital, similar to the one already in existence for premature infants born in the Royal Maternity Hospital.

Dental Treatment of Toddlers

This could probably best be arranged in conjunction with the dental treatment of schoolchildren. The toddlers could then attend along with their older brothers and sisters.

Staff

A dentist will be required to carry out the dental treatment of expectant mothers at our new Centres. The appointment might be filled on a part-time basis at first, but as the work increases, later on a full-time dentist would be required.

Demonstrators should be appointed to give demonstrations in cookery, needlework, etc., at these new Centres. Film shows, an excellent method of teaching, should also be provided for.

In the extension of the services in the post-war period, we should consider the question of bringing up the staff of doctors and health visitors to English and Scottish standards. This will be specially necessary if we are to give the child from one to five years regular periodic supervision.

It has been recommended that ante-natal clinics in the post-war period should be staffed by junior obstetricians paid on a sessional basis. Should this recommendation be adopted, extra financial provision would be required.

Financial Provision for Refresher Courses.

Convalescent Home for Mothers.

The question of establishing a convalescent home for mothers should be considered. Such a home can serve for both ante-natal and post-natal cases ; but it is especially useful for post-natal debilitated cases. This type of home performs useful educational work, as the mothers are given practical instruction in the care and management of their infants during their stay in the home.

Food and Drugs—Meat Inspection

Attention is drawn to the reports dealt with on these subjects. Too much stress cannot be laid on their importance. During the war, a number of smaller places have blossomed forth as retailers of teas, etc. These premises have been watched for cleanliness, etc., and a few prosecutions have been successfully instituted. The Ministry of Food, who have issued the necessary licences, have been informed, and the question of the prolongation of the life of some of these places has been discussed. During the year some fines were inflicted in cases where it was found that watered whiskey and gin had been sold. If people are willing to pay the sums now asked for whiskey, they should get what they ask for, and not a scarecrow edition of the same.

A very useful reorganisation has been made in the staff : the Food and Drugs Officers and the Meat Inspectors at the Abattoir, have been welded together, and a Senior Inspector has been appointed from the present staff. They will work directly under Captain McLean, City Veterinarian, who, in turn, will report to and consult with the Medical Superintendent Officer of Health, practically every day.

Shopkeepers know that if they have any consumable goods on their premises, about whose wholesomeness and fitness for human consumption they have any doubts, they have only to ring us up, and an inspector will call and accept surrender of the goods if he considers the same to be unfit. If, on the other hand, a vendor chooses to take a risk, and finds subsequently that an inspector makes a hawky pounce, then he cannot complain if he receives an invitation to meet Mr. Magistrate at the Court.

Port Sanitation

Owing to the war, the number of ships coming from foreign countries has been heavily reduced, and Mr. Gough, Port Sanitary Officer, has carried out his duties faithfully. Belfast is the fifth largest port in the United Kingdom ; despite this, we have only one Sanitary Inspector for the Port. I have asked before now for an additional inspector.

In his report on the City's health service, Dr. Carnwath said : "There is one Port Sanitary Officer. In my opinion, it is physically impossible in peace-time for one man to discharge all these duties efficiently."

The Harbour Commissioners have constructed a number of modern sanitary conveniences. We are in need of a building containing ample provision for delousing and cleansing ; also some provision should be made in the shape of a few beds for observation cases. The following is a list of our duties :—

(1) Inspection of crew's quarters on board all ships entering the port, and collaboration with the Board of Trade Surveyor in securing the abatement of nuisances and such improvement of the quarters and their amenities as are practicable.

(2) Taking such steps as are necessary to give effect to the Regulations implementing (a) the International Sanitary Convention of 1926, with regard to the control of certain diseases (plague, yellow fever, cholera, typhus, and smallpox), the fumigation of ships, and the issue of deratisation and deratisation exemption certificates ; the due performance of these international obligations greatly facilitates the movement of British ships in foreign ports. (b) The Brussels Convention regarding the treatment of venereal disease in sailors : appropriate arrangements for this have been made at the city clinics.

(3) Administration of the Psittacosis Order and the regulations as to Imported Food.

Factory and Workshops Act

Following the retiral of Mr. Kildea, Mr. McBride was chosen to carry out the duties of the office ; he has no assistance, and at least one additional man should be appointed. Here again Dr. Carnwath says :—"Mr. Kildea seems to do his best to carry out his duties as sole Inspector under this Act, but it is obvious that the effective supervision of some 2,900 premises (including bakehouses) is beyond his capacity."

I spoke to our former Chairman, the late Alderman Dr. Williamson, on the subject, but he did not feel that he could support my plea for additional assistance. A glance at the duties laid down in the Act should be enough to satisfy one that no single inspector could cope with this work.

Housing

In Appendix L of the Carnwath Report there is a statement on Housing, which I wrote some years ago. I dealt with the people's needs in my Annual Reports for 1934, 1935, and 1936. I advocated and described kitchen houses to let at a rent of six shillings ! New houses, and thousands of them, are required for the comfort and good health of the citizens. Tuberculosis and a high infant mortality-rate will prevail until houses are forthcoming. Room, space, light, and plenty of good plain food, properly cooked, are the things that matter. Why cannot all children get these? We would soon see firm, well-knit little bodies everywhere.

Office Accommodation

The time has come when something should be done to house the Public Health Department adequately. The School Medical and Maternity and Child Welfare Section, especially the latter, are overcrowded. The Senior Maternity and Child Welfare Officer has no office for himself. The Health Visitors are cramped for room. The clerical staff at the City Hall are also crowded. The accommodation we have at present is poor, having regard to the importance of the work, apart from the comfort of the staff. Different buildings have been examined, but, with one exception, none were suitable.

Public Health Propaganda

Prior to the war, we published a monthly magazine entitled "Better Health," but the coming of hostilities brought all such activities to an end. We are in touch with the Health Education Central Council as to terms re affiliation. Public Health Propaganda is imperative. Some ten years ago we held a most successful Health Week in the Ulster Hall. Expert speakers were engaged, and very large audiences attended lectures on such subjects as Cancer, Venereal Disease, etc. The question of sex education in schools by visiting experts, as well as home teaching, by parents, has been mentioned, but that is as far as it has gone.

I have been in touch with the Venereal Disease question for many years, and I am satisfied that it is a great mistake to let young people grow up in ignorance of physiological facts, and of the rocks ahead. Regulation 33B has been in operation for some time, and it has helped a little, through enabling us to follow up suspected sources of infection. Much of the information we get is of the scantiest, false names and addresses being common. One does not expect the male coadjutor in such cases to seek in advance details for subsequent identification purposes, from his partner in the adventure : frequently his condition, like his judgment, is off the plumb. There was considerable speculation as to the magnitude of the percentage increase in the number of V.D. cases during the war years. Certainly, there was an increase—there always has been in war-time, but not so grave as was suggested. Matters are becoming more normal. What are we to do about it all? V.D. will never be stopped : it might be reduced if we took children and young people into our confidence. Begin early by teaching the elements of biology, thus opening up the minds of the very young to the wonders of Nature, and making them think. Later, teach mothercraft, human physiology, and lastly, the moral and pathological aspects of the subject. They say that the inculcation of high moral teaching on more intensive lines will stop the trouble. It won't ! We have had generations of eminent preachers and the example of countless saintly lives, but we still get V.D. Of course, we must continue to spread the tenets of religion, but it is not enough. Trust the children, teach them, and don't cheat them out of the knowledge they are entitled to.

Lastly, about "notification" of the disease, the Belfast Corporation agreed to this, but the Ministry thought that this would drive the disease underground. In advocating notification, I have Army experts on my side, and, in addition, the experience of the State of New York and of Sweden. Britain has tried the voluntary system by propaganda, V.D. Regulations, and the somewhat timorous Regulation 33B, whereas Sweden has required compulsory treatment. What, then, are the results in these two countries? Compulsion in Sweden has reduced the incidence of congenital or inherited, and also of acquired, syphilis to a greater degree than has been done under the voluntary system in Britain.

The difference is so marked that we cannot escape the conclusion that during the past twenty-five years, Sweden has been much more successful than Britain in the control of the Venereal Diseases. Wherein does the difference lie? As Dr. S. M. Laird says : "The disease is the same, and similar facilities for free diagnosis and treatment exist in both countries. Sweden *compels* the infected individual to continue treatment until rendered non-infectious, and insists that, wherever possible, the source of infection and all infected contacts are sought out and brought under treatment. Britain enforces neither of these principles of control. Therein lies the difference in policy : is it not logical to conclude that there also lies the explanation of the success of the Swedish anti-venereal campaign?

How long, then, are we to put up with our weak voluntary system?

The School Medical Services

As this subject is dealt with in a separate report, I intend to confine myself to one or two observations.

When the Education Act (Northern Ireland), 1923, came into operation, there were very many most unsatisfactory and even unhygienic schools to be found in the city. By reason of the extensive building programme of the Education Authority, most of these have been closed and/or replaced, so that the standard of school buildings to-day is much above that then prevailing, making for a healthier environment during school hours for most of the scholars.

In 1923 there was only one open-air school in the City—established and controlled by the Tuberculosis Committee, and set up in conjunction with the Graymount Hospital, although it did not cater for the tuberculous child, but rather those in need of open-air education. Through this entirely inadequate building, which can only accommodate 125 children, many pupils have passed during the past two decades. What has been accomplished there should be amplified by the provision, immediately after the war, on priority grounds, of more up-to-date buildings, at least in three other sites in the City, to cater for the very much larger number of delicate children who would benefit by the education provided in such schools, where the curriculum is definitely geared to the child's ability and physical condition.

In concluding my report, I wish to express to the Council and to all my colleagues in the other Departments, my grateful thanks for all the kindness and support which I have received from them during my period of office. Of my brother officers throughout the various sections of the Public Health Department, I cannot speak too highly, for they have invariably given me loyal and affectionate support. It is not possible to mention all of these by name, so I will mention only two—Dr. Barron, my Deputy and faithful friend, a sound, conscientious and tireless worker ; Mr. James Davison, my Chief Clerk, a genial and kindly man, always ready for the next job.

No man could hope to carry out the responsible duties of the Medical Superintendent Officership of Health of this great city, without the loyalty and help of all these men : they have given me such in brimming over measure.

I have the honour to remain

Your obedient Servant,

CHAS. S. THOMSON,
Medical Superintendent Officer of Health.

TABLE I

Shewing the number of deaths at various age periods, the percentage of the total number registered, and the death-rates per 1,000 of the population.

	No. of Deaths	Percentage of Total Deaths	Death Rate per 1,000 of the Population
Under 1 year	927	17.9	2.1
1 year and under 5 years	123	2.4	0.3
5 years and under 25 years	255	4.9	0.6
25 years and under 45 years	511	9.9	1.2
45 years and under 65 years	1,254	24.2	2.9
65 years and upwards	2,106	40.7	4.9
Total	5,176		

TABLE II

Shewing the number of deaths from various causes, together with the percentage of the total number registered and the death-rate per 1,000 of the population.

Cause of Death	No. of Deaths	Percentage of Total Deaths	Death Rate per 1,000 of the Population
Typhoid Fever	—	—	—
Typhus Fever	—	—	—
Smallpox	—	—	—
Measles	1	0.02	0.002
Scarlet Fever	2	0.04	0.005
Whooping Cough	22	0.43	0.05
Diphtheria	11	0.21	0.02
Dysentery	1	0.02	0.002
Influenza	21	0.42	0.04
Diarrhœa and Enteritis (under 2 years of age)	184	3.55	0.43
Tuberculous Diseases—			
Tuberculosis of Respiratory System	354	6.84	0.82
Other forms of Tuberculosis	89	1.72	0.21
TOTAL TUBERCULOUS DISEASES	443	8.56	1.03
Diseases of the Respiratory System—(Tuberculosis excepted)			
Pneumonia	315	6.09	0.73
Other	286	5.59	0.66
Total Chest Affections	955	18.45	2.21
Cancer and Other Tumours	637	12.31	1.48
Violence or Accidents	177	3.42	0.41

TABLE III

Shewing the Population, the number of Births, the Birth Rate per 1,000, the number of Deaths, the Death Rate per 1,000, and the natural increase during the twenty years, 1925-1944.

YEAR	Population	No. of Births	Birth Rate per 1,000	No. of Deaths	Death Rate per 1,000	Natural Increase
1925 ...	438,000	10,234	23.4	6,131	14.0	4,103
1926 ...	416,000	10,356	24.9	6,411	15.4	3,945
1927 ...	416,000	9,509	22.9	5,653	13.6	3,856
1928 ...	415,151	9,356	22.5	5,804	14.0	3,552
1929 ...	415,151	8,899	21.4	6,462	15.6	2,437
1930 ...	415,151	9,558	22.7	5,451	12.9	4,107
1931 ...	415,151	9,470	22.8	5,857	14.1	3,613
1932 ...	415,151	8,882	21.4	5,783	13.9	3,099
1933 ...	415,151	8,599	20.7	6,318	15.2	2,281
1934 ...	415,151	9,086	21.9	5,676	13.7	3,410
1935 ...	415,151	8,848	21.3	6,238	15.0	2,610
1936 ...	436,000	9,242	21.2	6,207	14.2	3,035
1937 ...	438,112	9,150	20.9	6,341	14.5	2,809
1938 ...	443,500	9,146	20.6	6,069	13.7	3,077
1939 ...	443,500	8,966	20.2	5,758	12.9	3,208
1940 ...	444,500	8,704	19.6	6,583	14.8	2,121
1941 ...	444,500	8,383	18.9	6,641	14.9	1,742
1942 ...	444,500	9,659	21.7	4,973	11.2	4,686
1943 ...	425,000	10,713	25.2	5,511	13.0	5,202
1944 ...	430,800	10,456	24.3	5,176	12.0	5,280

TABLE IV

Shewing the number of Deaths registered as having been caused by Phthisis and Diseases of the Respiratory Organs during the twenty years, 1925-1944.

YEAR	Population	Phthisis	Rate per 1,000	Diseases of the Respiratory System			Total Chest Affections
				Pneumonia	Others	Total	
1925 ...	438,000	575	1.3	517	646	1,163	1,738
1926 ...	416,000	570	1.4	516	630	1,146	1,716
1927 ...	416,000	515	1.2	479	526	1,005	1,520
1928 ...	415,151	499	1.2	521	542	1,063	1,562
1929 ...	415,151	485	1.2	680	761	1,441	1,926
1930 ...	415,151	436	1.0	357	482	839	1,275
1931 ...	415,151	452	1.1	518	479	997	1,449
1932 ...	415,151	448	1.1	539	461	1,000	1,448
1933 ...	415,151	429	1.0	583	605	1,188	1,617
1934 ...	415,151	398	0.96	434	421	855	1,253
1935 ...	415,151	389	0.93	597	445	1,042	1,431
1936 ...	436,000	406	0.93	450	373	823	1,229
1937 ...	438,112	414	0.95	503	405	908	1,322
1938 ...	443,500	348	0.78	465	294	759	1,107
1939 ...	443,500	365	0.82	316	357	673	1,038
1940 ...	444,500	412	0.93	404	539	943	1,355
1941 ...	444,500	426	0.96	330	446	776	1,202
1942 ...	444,500	369	0.83	325	298	623	992
1943 ...	425,000	367	0.86	451	291	742	1,109
1944 ...	430,800	354	0.82	315	286	601	955

Maternity and Child Welfare

MIDWIVES

During the year 198 midwives gave the required notice of their intention to practise ; of these, 194 were certified by examination and 4 otherwise certified.

During the year the services of Medical Practitioners were requisitioned by midwives in 160 emergency cases, and the Belfast Corporation, as the Local Supervising Authority, paid in fees £118. 3s. 6d. for attendances in 63 cases.
Notifications received by Medical Superintendent Officer of Health :—

Under Form A.—Sending for Medical help	160
,, ,, B.—Notification of Death	14
,, ,, C.—Notification of Still-birth	355
,, ,, D.—Notification of having laid out a Dead Body	2
,, ,, E.—Source of Infection	6
,, ,, F.—Artificial Feeding	31

Number of Midwives disinfected owing to :—

Puerperal Fever	2
Puerperal Pyrexia	5
Rise of Temperature	3
Scarlet Fever	6
Measles	1
Suspected Diphtheria	1
Erysipelas	1

NOTIFICATION OF BIRTHS ACT

12,006 births were notified pursuant to the Notification of Births Act, and in addition, 44 were either discovered by Health Visitors or notified by the Registrars of Births, making a total of 12,050 ; of these, 6,137 were males, 5,912 were females, and 1 sex unknown ; 355 were still-births and 648 were illegitimate births.

Of the total number notified, 8,478 were selected for visitation and supervision, and during the year 48,997 visits were made.

Births :—

Attended by Medical Practitioners and Midwives ...	2,167
,, only by Midwives certified by examination ...	2,469
,, only by Dispensary Midwives	711
,, by Midwives otherwise certified	29
,, in Jubilee Maternity Hospital	2,028
,, in Royal Maternity Hospital	1,807
,, in other Maternity Hospitals	66
,, by Nurses from Maternity Hospitals	460
,, in Malone Place Home	319
,, in Thorndale Home	287
,, in Nursing Homes	1,703
,, No Information	4

12 cases of Ophthalmia Neonatorum occurred during the year. 11 completely recovered, and 1 died from another condition.

439 cases of Inflammation of Eyes occurred during the year.

73 cases of Puerperal Pyrexia occurred during the year ; of these, two died.

ANTE-NATAL REPORTS FOR THE YEAR 1944

The Royal Maternity Hospital

Total number of new patients	2,564
Total number of re-attendances	13,050

The Ulster Hospital, Templemore Avenue

New cases in Out-patient Department	157
Return cases in Out-patient Department	576

Malone Place Home

New Patients	356
Re-attendances	1,918

Municipal Clinics.

New Patients	2,500
Re-attendances	9,888

Thorndale Home, Duncairn Avenue (The Salvation Army), and The Belfast Midnight Mission and Rescue and Maternity Home, 31 Malone Place.

The above Homes, which receive grants from the Belfast Corporation, carried out their work during the year in a satisfactory manner.

MATERNITY AND CHILD WELFARE CENTRES

The following table shews the number of names on the roll of each Centre and the total number of attendances during the year, also the number of babies medically examined and the total number of examinations :—

TABLE V

	On Roll	Total No. of attendances by mothers	Babies medically examined	Total examinations of babies
Danube Street	440	4,254	490	1,179
Donegall Road (two sessions)	715	6,668	826	1,898
Dee Street	345	2,998	393	1,063
York Street	461	2,992	443	916
Spiers Place (two sessions)	576	5,057	680	2,032
Falls Road	515	2,936	485	1,285
Havelock Place	337	3,245	413	1,057
Woodstock (Wednesday)	550	4,263	586	1,318
*Woodstock (Friday)	291	1,592	208	537
Ligoniel	233	2,425	350	696
Mervue Street	397	3,355	380	1,123
Avoca Street	422	3,954	439	1,289
Divis Street	472	3,755	672	1,486
Sydenham	282	3,215	226	790
Glenard	408	3,472	554	1,499
Bloomfield	345	3,282	381	862
Greencastle	191	2,127	172	683
Susan Street	372	3,628	455	922
Seaview	175	2,028	412	752
*Joanmount	120	869	192	345
*Kimberley Street	182	1,204	205	416
*Spiers Place (Tuesday)	147	1,049	178	400
	7,906	68,368	9,140	22,548

*Commenced 1st August, 1944.

TABLE VI

Shewing the Deaths of Children under one year old per 1,000 births each year from 1925-1944.

YEAR	Deaths per 1,000 Births	YEAR	Deaths per 1,000 Births
1925	104	1935	112
1926	112	1936	101
1927	101	1937	94
1928	103	1938	96
1929	112	1939	85
1930	78	1940	122
1931	90	1941	91
1932	111	1942	92
1933	102	1943	111
1934	80	1944	89

TABLE VII

Legal Proceedings

	SUMMONSES	ORDERS	FINES £	s	d
Under Public Health Acts—					
For abatement of nuisances	851	55	11	15	0
Disobedience of Justices' Orders	4	—	2	10	0
For having deposited for the purpose of sale unsound food	3	—	40	0	0 and in one case also one month's imprisonment.
Under Preservatives in Food Regulations	5	—	3	0	0
Under Factories Act	1	—	—		
Under Defence (General) Regulations, Regulation 33B	1	—	—		
Under Sale of Food and Drugs Acts	—	—	*176	0	0

*Actual amount imposed in 1944, which includes cases pending at the end of 1943.

TABLE VIII

Rainfall

The following Table, kindly supplied by Mr. D. McGarrigle, Secretary and Registrar to the Belfast City and District Water Commissioners, shows the rainfall in inches during the several months of the year as recorded at the Water Works at Old Park.

	1944
January	5.00
February	2.03
March	.97
April	2.82
May	1.78
June	3.12
July	4.42
August	3.60
September	6.08
October	5.20
November	6.08
December	5.18
	46.28

Report of the City Veterinarian

On the Work of his Department for the Year 1944

To The Medical Superintendent Officer of Health.

Sir,

I beg to submit my report on the work at the Belfast Municipal Abattoir, in connection with the Ante-mortem and Post-mortem examinations of the animals slaughtered for human food.

Table shewing the number and description of Animals slaughtered and the number condemned during the year.

	Cows	Heifers	Bulls	Bullocks	Calves	Sheep and Lambs	Goats	Pigs	Total
Slaughtered	27,388	14,755	968	27,891	10,274	156,506	1,800	1,671	241,253
Condemned	1,474	28	10	84	256	203	11	37	2,103

Table shewing amount examined and amount seized and destroyed at the Meat Inspection Station, Public Abattoir.

BEEF—Sides examined, 42 ; seized and destroyed, 5. Quarters examined, 70 ; seized and destroyed, 19. Cuts examined, 115 ; seized and destroyed, 62.

MUTTON—Carcases examined, 45 ; seized and destroyed, 7.

PORK—Carcases examined, 221 ; seized and destroyed, 97.

VEAL—Carcases examined, 4 ; seized and destroyed, 2.

FOWL—Fowl examined, 2,739 ; seized and destroyed, 2,739.

TINNED MEATS—Tinned Meats examined, 3,558 ; seized and destroyed, 3,540.

Services Rendered to Other Departments.

During the year, a general supervision of the health of the animals of the several Committees of the Corporation was exercised. Several animals were purchased for the different departments.

Fortunately, the most of the work during the year was in the nature of preventive medicine, and calls for little comment.

Yours faithfully,

ALEX. McLEAN,
City Veterinarian and Manager of Abattoir.

Sale of Food and Drugs Acts

During the Year 1,700 Samples were taken for Analysis.

Return shewing particulars of adulterated samples.

NATURE OF SAMPLE	Samples Taken	Adulterations	Prosecutions	Convictions	Probation of Offenders Act	FINES		
						£	s.	d.
Baking Powder	32	2	—	—	—	—		
Baking Powder (informal)	6	1	—	—	—	—		
Buttermilk	9	1	1	1	—	1	0	0
Buttermilk (informal)	15	7	—	—	—	—		
Cinnamon, Ground	5	1	—	—	—	—		
Egg Substitute Powder	1	1	—	—	—	—		
Egg Substitute Powder (informal)	1	1	—	—	—	—		
Gelatine Powder	3	2	—	—	—	—		
Golden Raising Powder (informal)	2	1	—	—	—	—		
Orange Juice (informal)	1	1	—	—	—	—		
Potato Crisps (informal)	2	1	—	—	—	—		
Sausages	16	1	1	1	—	1	0	0
Sausage Meat	2	1	1	1	—	2	0	0
Sweetmilk	517	21	14	10	4	47	0	0
Sweetmilk (informal)	305	8	—	—	—	—		
Whiskey	5	2	2	2	—	32	0	0
Whiskey (informal)	23	7	—	—	—	—		
						£83	0	0

In the foregoing return, the term "informal" is used where the formalities of the Sale of Food and Drugs Acts were not observed in taking the samples.

Cases of Adulteration in which no Legal Proceedings were taken.

FORMAL SAMPLES:

2 of Baking Powder, 1 of Ground Cinnamon, 1 of Egg Substitute Powder, 2 of Gelatine Powder, and 7 of Sweet Milk.

Public Health Acts

Unsound foodstuffs inspected by the Food and Drugs Inspectors under above Acts, and destroyed or disposed of otherwise than for the food of man, under their supervision.

1,439	tins	Beans
4,359	"	Condensed Milk
2,490	"	Fish
1,021	"	Fruit
231	"	Fruit Juice
1,655	"	Jam
3,553	"	Meat
106	"	Peas
1,379	"	Pudding Mixture
775	"	Soup
209	"	Syrup
1,572	"	Vegetables
1,931	"	Unlabelled Foodstuffs.

91 tins and 25 tons 11 cwt. 1 qr. 13 lb., 297 jars and 360 packets of miscellaneous items; also 208 fowl.

Infectious Diseases

SCARLET FEVER.

1,679 cases of Scarlet Fever were notified during the year, but on invesigation 50 were found not suffering from the disease. In addition to those notified, 2 cases notified as Diphtheria, and 1 case as Cerebro-Spinal Fever were found to be suffering from Scarlet Fever, which made the total number that occurred during the year 1,632 ; an attack-rate of 3.8 per 1,000 of the population.

The number of cases which occurred during the preceding year was 1,927, and the average number notified annually during the ten years 1934—1943 was 1,755.

2 deaths occurred, equivalent to a case mortality-rate of 0.1 per cent., or a death-rate of 0.002 per 1,000 of the population. There were 3 deaths in the preceding year. The average number annually during the ten years 1934—1943 was 10.

DIPHTHERIA.

217 cases were notified, but on investigation 44 were found not suffering from the disease, which made the total number that occurred during the year 173 ; an attack-rate of 0.4 per 1,000 of the population.

The number of cases that occurred during the preceding year was 234, and the average number notified annually during the ten years 1934—1943 was 798.

11 deaths occurred, equivalent to a case mortality-rate of 6.4 per cent., or a death-rate of 0.02 per 1,000 of the population. The number of deaths in the preceding year was 10, and the average number annually during the ten years 1934—1943 was 36.

TYPHOID FEVER.

5 cases were notified during the year ; an attack-rate of 0.01 per 1,000 of the population.

The number of cases which occurred during the preceding year was 28, and the average number notified annually during the ten years 1934—1943 was 30.

No deaths occurred during the year. 4 deaths occurred in the preceding year ; the average number occurring annually during the ten years 1934—1943 was 2.

ERYSIPELAS.

67 cases were notified during the year, 1 of which was found not suffering from the disease, which made the total number that occurred during the year 66.

The number of cases that occurred in the preceding year was 58, and the average number notified annually during the ten years 1934—1943 was 112.

CEREBRO-SPINAL FEVER.

48 cases were notified during the year, 5 of which were found not suffering from the disease, making the total number of cases that occurred during the year 43 ; an attack-rate of 0.1 per 1,000 of the population. Of these, 3 deaths occurred, equivalent to a case mortality-rate of 7.0 per cent., or a death-rate of 0.007 per 1,000 of the population.

MEASLES.

3,048 cases of Measles were notified during the year, an attack-rate of 7.1 per 1,000 of the population.

The number of cases that occurred during the preceding year was 1,462.

1 death occurred during the year The number of deaths in the preceding year was 11, and the average number annually during the ten years 1934—1943 was 72.

WHOOPING-COUGH

734 cases of Whooping-Cough were notified during the year, an attack-rate of 1.7 per 1,000 of the population.

The number of cases notified during the preceding year was 1,285.

22 deaths were caused by whooping cough, equivalent to a death-rate of 0.05 per 1,000 of the population. In the preceding year the number of deaths from this disease was 40, and the average number registered annually during the ten years 1934—1943 was 37.

DIARRHŒA AND ENTERITIS.

184 deaths of children under 2 years of age were caused by this disease during the year, equivalent to a death-rate of 0.43 per 1,000 of the population.

The number of deaths that occurred during the preceding year was 296, and the average number of deaths annually during the ten years 1934—1943 was 202.

PUERPERAL FEVER.

5 cases of this disease were notified. The number of cases notified during the preceding year was 2, and the average number notified annually during the ten years 1934—1943 was 13.

EPIDEMIC DISEASES.

242 deaths were caused by epidemic diseases during the year, equivalent to 4.7 per cent. of the total number of deaths from all causes, or a death-rate of 0.6 per 1,000 of the population. During the preceding year the deaths from epidemic diseases numbered 414, equivalent to 7.5 per cent. of the total deaths, or a death-rate of 1.0.

1, or 0.4 per cent of the total deaths from epidemic diseases was caused by Measles ; 2, or 0.8 per cent., by Scarlet Fever ; 22, or 9.1 per cent., by Whooping-Cough ; 11, or 4.5 per cent., by Diphtheria ; 21, or 8.7 per cent., by Influenza ; and 184, or 76.0 per cent., by Diarrhœa and Enteritis.

TABLE IX

Shewing the number of deaths registered as having been caused by Epidemic Diseases, also the annual rate of mortality per 10,000 of the population during the twenty years 1925—1944.

Year	POPULATION	Typhoid Fever		Scarlet Fever		Diphtheria		Whooping Cough		Measles		Diarrhœa	
		Number of Deaths	Annual Rate per 10,000	Number of Deaths	Annual Rate per 10,000	Number of Deaths	Annual Rate per 10,000	Number of Deaths	Annual Rate per 10,000	Number of Deaths	Annual Rate per 10,000	Number of Deaths	Annual Rate per 10,000
1925	438,000	18	0.41	49	1.1	38	0.9	99	2.3	167	3.8	203	4.6
1926	416,000	6	0.1	12	0.3	44	1.1	46	1.1	132	3.2	287	6.9
1927	416,000	8	0.2	10	0.2	30	0.7	117	2.8	1	0.02	195	4.7
1928	415,151	13	0.3	21	0.5	16	0.4	50	1.2	169	4.1	196	4.7
1929	415,151	4	0.1	8	0.2	19	0.5	138	3.3	77	1.9	149	3.6
1930	415,151	2	0.05	7	0.2	22	0.5	65	1.6	6	0.1	116	2.8
1931	415,151	1	0.02	13	0.3	13	0.3	32	0.8	133	3.2	100	2.4
1932	415,151	1	0.02	10	0.2	19	0.5	102	2.5	30	0.7	151	3.6
1933	415,151	2	0.05	11	0.3	47	1.1	33	0.8	78	1.9	165	4.0
1934	415,151	...	...	11	0.3	43	1.0	49	1.2	18	0.4	111	2.7
1935	415,151	11	0.3	37	0.9	55	1.3	22	0.5	251	6.0	249	6.0
1936	436,000	1	0.02	13	0.3	38	0.9	64	1.5	7	0.2	229	5.3
1937	438,112	7	0.16	7	0.16	14	0.3	32	0.7	27	0.6	173	3.9
1938	443,500	...	...	8	0.2	11	0.2	51	1.1	224	5.0	145	3.3
1939	443,500	...	...	7	0.2	34	0.8	35	0.8	13	0.3	187	4.2
1940	444,500	1	0.02	10	0.2	85	1.9	54	1.2	150	3.4	288	6.5
1941	444,500	...	...	2	0.04	56	1.3	19	0.4	...	...	179	4.0
1942	444,500	...	...	...	...	15	0.3	9	0.2	17	0.4	166	3.7
1943	425,000	4	0.09	3	0.07	10	0.2	40	0.9	11	0.3	296	7.0
1944	430,800	...	...	2	0.05	11	0.2	22	0.5	1	0.02	184	4.3

The last death from Typhus Fever occurred in 1928;
and the last death from Smallpox in 1905.

Infectious Diseases

CORRECTED DIAGNOSIS FOR 1944.

50 cases of Scarlet Fever, 44 cases of Diphtheria, 1 case of Erysipelas, and 5 cases of Cerebro-Spinal Fever were found not suffering from the disease notified. Of these, 2 Diphtheria and 1 Cerebro-Spinal Fever were found to be suffering from Scarlet Fever. The remainder were found not to be suffering from any notifiable disease.

TABLE X

Shewing the number of cases of infectious diseases notified during the ten years 1935—1944, pursuant to the Infectious Disease (Notification) Act, 1889.

	Typhoid Fever	Scarlet Fever	Diphtheria	Cerebro-Spinal Meningitis	Poliomyelitis	Puerperal Fever	Erysipelas
1935 -	117	3394	1201	19	22	31	155
1936 -	21	1811	1053	14	2	22	135
1937 -	21	1486	847	20	2	11	128
1938 -	12	2107	664	35	3	14	119
1939 -	20	1696	686	12	5	7	134
1940 -	17	1266	1165	166	2	9	115
1941 -	44	453	683	246	7	3	83
1942 -	10	778	427	122	5	12	82
1943 -	29	1964	322	75	2	2	60
1944 -	5	1679	217	48	5	5	67

Measles - 3,048

Whooping Cough - 734

TABLE XI

Shewing the number of deaths from Cancer and other Tumours for the year **1944**, as compared with the preceding five years.

YEAR.		1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90			
	Under 1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	and over	M	F	Grand Total
1944	...	...	...	1	1	2	...	3	3	8	13	17	29	46	54	76	100	108	91	57	19	6	3	315	322	637
1939	...	2	...	...	...	3	...	4	3	10	7	20	38	38	61	78	89	98	86	39	24	3	—	264	339	603
1940	...	...	...	1	...	...	1	3	2	6	10	12	32	45	53	79	89	97	95	50	22	6	1	270	334	604
1941	...	...	1	...	...	1	4	4	7	9	5	11	29	49	48	78	84	114	83	35	25	7	—	267	327	594
1942	2	...	1	1	...	2	1	3	...	2	12	23	40	49	66	78	90	104	94	55	18	10	2	312	341	653
1943	...	1	...	2	...	1	2	1	1	4	7	16	25	49	68	66	98	106	103	58	20	5	2	287	348	635
TOTALS	2	3	2	4	...	7	8	15	13	31	41	82	164	230	296	379	450	519	461	237	109	31	5	1,400	1,689	3,089

It will be seen from the above table that the average number of deaths registered annually as having been caused by Cancer and other Tumours during the quinquennial period 1939 to 1943 was 618 (280 males and 338 females).

Diphtheria Immunisation

During the year 8,428 persons completed a course of treatment against diphtheria ; of these, **6,798** were immunised at clinics, schools, and institutions, **1,453** by private practitioners with material supplied by the Department, and **177** by the medical staff at Purdysburn Fever Hospital, while undergoing treatment for scarlet fever.

The total number of persons who had completed a course of treatment from the inception of the work in October, **1936**, until the end of December, **1944**, details of whose age grouping are given in the table below, was **65,049**.

Table shewing age grouping of children immunised since October, **1936**.

Age at Date of Inoculation	1936-37	1938	1939	1940	1941	1942	1943	1944	
Under 1 year -	27	21	6	17	33	71	36	69	Total under 5 years at end of 1944 **14,304** Equal to 45% of this age-group
1 year - -	362	413	253	299	906	1634	2576	2492	
2 years - -	470	363	204	335	1405	1373	1642	1329	
3 years - -	539	450	205	285	1258	985	1043	628	
4 years - -	527	534	268	346	1228	937	997	455	
5 years - -	814	690	366	508	1262	929	1022	663	Total over 5 and under 10 years at end of 1944 **24,361** Equal to 60% of this age-group
6 years - -	1336	1209	656	818	1408	1123	1133	965	
7 years - -	1281	1539	753	756	1356	1017	963	802	
8 years - -	905	1233	420	399	995	567	706	492	
9 years - -	645	668	223	182	647	315	382	251	
10 years - -	506	295	119	88	433	221	222	107	Total over 10 and under 15 years at end of 1944 **20,378** Equal to 51% of this age-group
11 years - -	358	127	50	61	200	103	81	44	
12 years - -	289	95	29	33	213	85	73	33	
13 years - -	192	77	28	22	171	86	78	47	
14 years - -	136	62	17	20	141	60	40	26	
Over 15 years -	148	58	24	11	78	180	37	25	Total over 15 years **6,006**

Mosquito Control

Attention was again directed during the year to draining and spraying in order to remove the breeding-places of the mosquito. **26** samples of larvæ were taken and brought to the Department for examination. All of these were found to be mosquito larvæ.

340 gallons of "Civic" Fluid,
203 gallons of Crude Oil, and
202 gallons of Paraffin Oil
were used in spraying.

Treatment of Scabies

During the year 5,747 treatments were carried out at the Scabies Clinic at the Disinfecting Station, Laganbank Road.

Venereal Diseases

Statement showing the services rendered at the Treatment Centre at Royal Victoria Hospital, Belfast, during the year ended 31st March, 1945, classified according to the areas in which the patients resided.

Name of County or County Borough	Belfast	Co. Down	Co. Antrim	Co. Armagh	Co. Derry	Co. Fermanagh	Co. Tyrone	Port	Gibraltar Evacuees	City of Manchester	Total
A. Number of cases from each area dealt with during the year for the first time and found to be suffering from:—											
Syphilis - - - -	309	20	30	1	7	1	3	53	...	...	424
Gonorrhœa - - - -	278	35	27	5	3	...	2	37	2	...	389
Soft Chancre - - - -	...	...	...	...	...	...	...	...	...	...	...
Conditions other than Venereal -	1,713	21	26	1	3	...	...	34	...	...	1,798
Total - - - -	2,300	76	83	7	13	1	5	124	2	...	2,611
B. Total number of attendances of all patients residing in each area - - -	18,780	838	1,245	85	171	19	87	383	52	...	21,660
C. Aggregate number of "In-patient days" of all patients residing in each area - -	1,131	242	213	...	184	...	27	3	4	...	1,804
D. Number of doses of arseno-benzol compounds given in the: 1. Out-Patient Clinic -	10,708	695	1,121	50	170	28	90	277	...	...	13,139
2. In-Patient Dept. -	86	12	...	...	37	...	7	...	...	1	143
to patients residing in each area											

Venereal Diseases

Return relating to all Persons who were treated at the Treatment Centre at Royal Victoria Hospital, Belfast, during the year ended 31st March, 1945.

	SYPHILIS		GONORRHOEA		SOFT CHANCRE		CONDITIONS OTHER THAN VENEREAL		TOTAL		
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
1. Number of cases which:— (a) at the beginning of the year under report were under treatment or observation for - -	4,082	1,940	3,541	63	...	...	...	...	7,623	2,003	
(b) had been marked off in a previous year as having ceased to attend or as transferred to other Centres, and which returned to the Treatment Centre during the year under report suffering from the same infection -	92	41	58	4	...	...	...	...	150	45	
TOTAL—Items 1 (a) and (b) - -	4,174	1,981	3,599	67	...	...	...	...	7,773	2,048	
2. (a) Number of cases dealt with at the Treatment Centre during the year for the first time -	237	187	309	80	...	...	1,194	604	1,740	871	
TOTAL—Items 1 (a), 1 (b), and 2 (a) -	4,411	2,168	3,908	147	...	..	1,194	604	9,513	2,919	
2. (b) Number of cases included in Item 2 (a) known to have received previous treatment at other Centres for the same infection - - -	31	10	4	...	...	...	...	...	35	10	
3. Number of cases which ceased to attend— (a) before completing the first course of treatment for - - - - - -	15	15	33	17	...	...	...	...	48	32	
(b) after one or more courses, but before completion of treatment for - - -	8	11	4	...	...	...	...	...	12	11	
(c) after completion of treatment, but before final tests as to cure of - - - - -	...	...	...	...	...	...	...	...	...	...	
4. Number of cases transferred to other Treatment Centres after treatment for - - - -	18	8	12	...	...	...	...	...	30	8	
5. Number of cases discharged after completion of treatment and observation for - - -	...	...	102	...	...	...	...	...	102	...	
6. Number of cases which, at the end of the year under report, were under treatment or observation for - - - - - - -	4,370	2,134	3,757	130	...	...	...	...	8,127	2,264	
TOTAL—Items 3, 4, 5, and 6 - -	4,411	2,168	3,908	147	...	...	...	...	8,319	2,315	
7. Out-patient attendances:— (a) For individual attention by the Medical Officer - - - - - - -	...	...	...	...	...	...	...	...	...	...	
(b) For intermediate treatment, e.g., irrigation, dressings, etc. - - - - -	...	...	4,411	...	...	...	...	...	4,411	...	
TOTAL ATTENDANCES - - -	...	...	...	...	...	...	...	...	...	...	21,660
8. Aggregate number of "In-patient days" of treatment given to persons who were suffering from -	420	342	272	770	...	...	...	...	692	1,112	

Venereal Diseases

Statement showing the services rendered at the Treatment Centre at Mater Infirmorum Hospital, Belfast, during the year ended 31st March, **1945**, classified according to the areas in which the patients resided.

NAME OF COUNTY OR COUNTY BOROUGH	Belfast	Co. Antrim	Co. Down	Co. Derry	Co. Tyrone	Port	TOTAL
A. Number of cases from each area dealt with during the year for the first time and found to be suffering from:—							
Syphilis	89	10	7	1	1	5	113
Gonorrhœa	106	8	8	...	...	7	129
Soft Chancre	...	...	...	...	...	...	...
Conditions other than Venereal	453	...	...	...	...	2	455
TOTAL	648	18	15	1	1	14	697
B. Total number of attendances of all patients residing in each area	4,383	112	95	3	4	87	4,684
C. Aggregate number of "In-patient days" of all patients residing in each area	227	34	14	3	7	...	285
D. Number of doses of arseno-benzol compounds given in the: 1. Out-Patient Clinic	1,859	48	34	...	...	24	1,965
2. In-Patient Dept.	57	9	4	2	2	...	74
to patients residing in each area							

Venereal Diseases

Return relating to all Persons who were treated at the Treatment Centre at Mater Infirmorum Hospital, Belfast, during the year ended 31st March, 1945.

	SYPHILIS		GONORRHOEA		SOFT CHANCRE		CONDITIONS OTHER THAN VENEREAL		TOTAL	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1. Number of cases which:—										
(a) at the beginning of the year under report were under treatment or observation for - -	297	67	55	3	2	...	27	20	381	90
(b) had been marked off in a previous year as having ceased to attend or as transferred to other Centres, and which returned to the Treatment Centre during the year under report suffering from the same infection -	7	1	2	...	...	...	2	...	11	1
TOTAL—Items 1 (a) and (b) - -	304	68	57	3	2	...	29	20	392	91
2. (a) Number of cases dealt with at the Treatment Centre during the year for the first time -	80	33	97	32	...	...	236	219	413	284
TOTAL—Items 1 (a), 1 (b), and 2 (a) -	384	101	154	35	2	...	265	239	805	375
2. (b) Number of cases included in Item 2 (a) known to have received previous treatment at other Centres for the same infection - - -	17	4	8	...	...	...	...	...	25	4
3. Number of cases which ceased to attend—										
(a) before completing the first course of treatment for - - - - - - -	4	...	6	...	...	...	...	...	10	...
(b) after one or more courses, but before completion of treatment for - - -	16	2	4	...	...	...	...	...	20	2
(c) after completion of treatment, but before final tests as to cure of - - - -	32	13	40	7	...	...	...	...	72	20
4. Number of cases transferred to other Treatment Centres after treatment for - - - -	42	5	16	...	...	...	...	...	58	5
5. Number of cases discharged after completion of treatment and observation for - - -	45	12	57	21	2	...	...	...	104	33
6. Number of cases which, at the end of the year under report, were under treatment or observation for - - - - - - -	245	69	31	7	...	...	30	21	306	97
TOTAL—Items 3, 4, 5, and 6 - -	384	101	154	35	2	...	30	21	570	157
7. Out-patient attendances:—										
(a) For individual attention by the Medical Officer - - - - - - -	1,819	652	755	181	4	...	384	358	2,962	1,191
(b) For intermediate treatment, e.g., irrigation, dressings, etc. - - - - - -	190	61	189	85	6	...	...	...	385	146
TOTAL ATTENDANCES - - -	2,009	713	944	266	10	...	384	358	3,347	1,337
8. Aggregate number of "In-patient days" of treatment given to persons who were suffering from -	124	161	...	...	...	...	...	...	124	161

Purdysburn Fever Hospital, Belfast

To the Medical Superintendent Officer of Health.

Dear Sir,

I beg to submit the Annual Report for the year 1944 (52 weeks ending 30th December, 1944).

2,582 cases were admitted during this period, 249 cases remained from the previous year, making 2, 831 cases under treatment ; 123 cases remained in hospital, so that 2,708 cases were treated to a conclusion.

The number of admissions in the previous year was 3,566, and the average number of admissions in the previous five years, 2,799.

TABLE 1

Showing the classification of cases and the mortality in cases treated to a conclusion.

Disease	Remaining on 1/1/44	Admitted during Year	Total	Remaining on 30/12/44	Nett	Died	Mortality per cent. calculated on cases treated to a conclusion
Enteric Typhoid - -	...	5	5	1	4	...	0.00
Para A - -	...	...	...	...	...	...	
Para B - -	...	...	...	...	...	...	
Scarlatina - - -	207	1,611	1,818	83	1,735	1	0.06
Diphtheria - - -	17	188	205	11	194	7	3.61
Cerebro-Spinal Fever -	9	48	57	3	54	3	5.55
Tuberculous Meningitis -	...	14	14	...	14	14	100.00
Acute Poliomyelitis -	...	4	4	...	4	...	0.00
Pneumonia - - -	...	14	14	1	13	...	0.00
Erysipelas - - -	2	12	14	...	14	...	0.00
Whooping Cough - -	3	22	25	2	23	1	4.35
Measles - - -	...	128	128	15	113	...	0.00
Other Diseases - -	11	536	547	7	540	21	3.89
Totals - -	249	2,582	2,831	123	2,708	47	1.74
Comparative Nos. in 1943	232	3,566	3,798	249	3,549	97	2.73

ENTERIC FEVER.

5 cases of Enteric B.T. were admitted during the year.

No cases remained over from the previous year, one remained at the end of this year, so that 4 cases were treated to a conclusion. There were no deaths from Enteric Infection. The 5 admissions all came from within the city boundary. In the previous year the admissions numbered 29. Average number of admissions for the previous five years was 23.

DIPHTHERIA.

188 cases were admitted during the year. 17 remained from the previous year and 11 remained at the end of this year, so that 194 cases were treated to a conclusion ; of these, 7 died, giving a death-rate of 3.61 per cent.

The average stay in hospital of the cases which recovered was 32 days.

Of the admissions, 174 came from within the city boundary, 2 from outside the city boundary, and 12 were military patients.

In the previous year the admissions numbered 286 ; average number of admissions for the previous five years was 623.

TABLE 2

Showing case mortality in age periods.

Ages	Cases	Deaths	Mortality Per Cent.
Under 1 year - -	5	...	0.00
1— 2 years - -	5	2	40.00
2— 5 years - -	33	3	9.09
5—10 years - -	46	2	4.35
10—20 years - -	71	...	0.00
Over 20 years - -	34	...	0.00
Totals -	194	7	3.61

The age incidence of clinical Diphtheria is of interest, as of the 194 cases admitted, only 43 were under five years and 105 were over ten years.

LARYNGEAL DIPHTHERIA.

7 cases required operative interference for laryngeal obstruction. There was 1 death from toxæmia in a child wearing an O'Dwyer tube.

2 cases were treated by suction (followed by intubation), 4 were treated by intubation only. One case had primary intubation followed by tracheotomy.

TABLE 3

Showing results in age periods in cases in which operative interference was required.

Ages	Cases	Deaths	Mortality Per Cent.
Under 1 year - -	0	0	00.00
1—2 years - -	0	0	00.00
2—3 years - -	3	0	00.00
3—4 years - -	0	0	00.00
4—5 years - -	4	1	25.00
Over 5 years - -	0	0	00.00
Totals -	7	1	14.29

CEREBRO-SPINAL FEVER.

48 cases were admitted during the year. 9 cases remained from the previous year, and 3 remained at the end of this year, so that 54 cases were treated to a conclusion ; of these, 3 died, all of whom were resident in the city, giving a mortality of 5.55 per cent.

Of the 48 admissions, 42 were from the city and 2 from outside the city boundary, 4 were military patients.

In the previous year the admissions numbered 71 ; average number of admissions for the previous five years was 129.

TABLE 4

Showing the case mortality in age periods.

Ages	Cases	Deaths	Mortality Per Cent.
Under 1 year - -	10	1	10.00
1— 2 years - -	5	...	0.00
2— 5 years - -	7	...	0.00
5—10 years - -	5	...	0.00
10—20 years - -	10	1	10.00
20—30 years - -	10	...	0.00
30—40 years - -	2	...	0.00
40—60 years - -	5	1	20.00
Over 60 years - -	...	...	0.00
Totals -	54	3	5.55

TUBERCULOUS MENINGITIS.

14 cases were admitted, and treated to a conclusion during the year. All of these cases died in hospital.

ACUTE POLIOMYELITIS.

4 cases were admitted during the year, and left hospital with some degree of paralysis.

SCARLATINA.

1,611 cases were admitted, 207 remained from the previous year, 83 remained this year, so that 1,735 were treated to a conclusion. Of these, 1 died, giving a mortality of 0.06 per cent.

In the previous year the admissions numbered 2,040 ; average number of admissions for the previous five years was 1,248.

Return Cases.

In 30 cases the return home of a Scarlatina patient was followed by other cases of Scarlatina in the household, giving a return rate of 1.7 per cent. On the average, these 30 cases had reached the thirty-third day from onset of their disease when they were discharged.

PENICILLIN.

During the period under review Penicillin was made available for the treatment of patients requiring it urgently. Seven cases were so treated, and all recovered. These included 3 cases of Cerebro-Spinal Fever, aged 5 months, 9 months, and 24 years, respectively ; and 2 cases of Pneumococcal Meningitis, aged 10 years and 27 years, respectively. One child of 4½ years, suffering from Gravis Diphtheria, probably owed his survival to Penicillin. The seventh case was a boy suffering from Rat-Bite Fever, and details of this, the first case of the kind in which Penicillin treatment is recorded, were published in the "Ulster Medical Journal" of November, 1944, and "The Lancet" of 21st October, 1944.

Yours faithfully,

F. F. KANE,
Medical Superintendent.

Municipal Laboratory,
Queen's University,
Belfast,

20th *March*, 1945.

To the Medical Superintendent Officer of Health.

Dear Sir,

I beg to present herewith a summary of the work carried out at the laboratory during the year 1944.

INFECTIOUS DISEASES.

	Pos.	Neg.	Total
Diphtheria.			
1. Swabs from Practitioners	106	1,148	1,254
2. Do. Hospitals	791	3,313	4,104
3. Do. Public Health Department	10	160	170
4. Do. Contacts	1	36	37
5. Direct Examinations	1	147	148
6. Virulence Tests	8	9	17
Vincent's Angina.			
Swabs	105	174	279
Enteric Group.			
1. Agglutination Reactions	20	129	149
2. Fæces, Blood, etc.	27	79	106
Food Poisoning.			
Food Stuffs	—	—	76
Meningitis.			
1. Cerebro-spinal Fluids	22	186	208
2. Typing	—	—	2
Tuberculosis.			
1. Sputa	42	337	379
2. Pus	0	14	14
3. Urine	1	32	33
4. Fluids	1	3	4
5. Cerebro-spinal Fluids	2	38	40
Plague.			
Rats	—	—	382
Streptococcal Infections.			
Swabs for Group Typing	17	65	82
Dysentery.			
Fæces	9	39	48

BRUCELLA ABORTUS INFECTIONS.

	Pos.	Neg.	Total
Bloods	9	134	143
Milks	9	101	110

VENEREAL DISEASES.

	Pos.	Neg.	Total
Wassermann Reactions (Blood)	225	1,887	2,112
Wassermann Reactions (C.S.F.)	7	3	10
Films for Gonococci	29	147	176
Kahn Reactions	—	—	2,112

MILK EXAMINATIONS.

Grade A	2
Grade B	18
Grade B (Pasteurized)	46
Grade C	171
Grade C (Pasteurized)	315
Reductase Tests	552
Biological Tests for T.B.	107

WATER EXAMINATIONS.

Ordinary Water	12

UNCLASSIFIED EXAMINATIONS.

Urines, Pus, etc.	193
Blood Films, Counts, etc.	156

Yours faithfully,

G. F. W. TINSDALE,
City Bacteriologist.

Port Sanitary Authority, Belfast

Report for the Year 1944

I.—AMOUNT OF SHIPPING ENTERING THE PORT DURING THE YEAR.

TABLE A

Number Inspected		Number Reported to be Defective	Number of Vessels on which Defects were Remedied	Number of Vessels Reported as having or having had during the voyage Infectious Disease on Board
By Medical Officer	By Sanitary Inspector			
75	1817	588	579	11

TABLE C

Cases of Infectious Sickness landed from vessels.

Disease	Number of Cases During 1944		Number of Vessels Concerned
	Passengers	Crew	
Tuberculosis - -	6	...	6
Scarlet Fever - -	...	1	1
Pneumonia - -	...	1	1
Weil's Disease -	...	1	1
Scabies - -	...	4	2

TABLE D

Cases of Infectious Sickness occurring on vessels during the voyage, but disposed of prior to arrival.

Disease	Number of Cases During 1944		Number of Vessels Concerned
	Passengers	Crew	
Scarlet Fever - -	...	1	1
Influenza - -	...	2	1
Pneumonia - -	...	2	2

No case of plague, cholera, yellow fever, smallpox, or typhus fever occurred, and no plague-infected rats were discovered during the year.

THE PARROTS (PROHIBITION OF IMPORT) REGULATIONS, 1930.

No notices were served during the year under above Regulations.

NUMBER OF RATS DESTROYED DURING THE YEAR.

TABLE E

(1) On Vessels.

Destroyed	Examined	Found to be Infected with Plague
310	247	None

TABLE F

(2) In Docks, Quays, Wharves, and Warehouses.

Destroyed	Examined	Found to be Infected with Plague
175	135	None

TABLE G

Measures of Rat Destruction on Plague "Infected or Suspected" Vessels, or Vessels from Plague Ports arriving in the Port during the year.

Total Number of such vessels arriving	Number of such vessels fumigated with So2	Number of rats killed	Number of such vessels fumigated with HC.*n*	Number of rats killed	Number of such vessels on which trapping, poisoning, etc., were employed	Number of rats killed	Number of such vessels on which measures of rat destruction were not carried out
20	...	...	...	...	11	36	9

TABLE H

Deratization Certificates and Deratization Exemption Certificates issued during the year.

Number of Ships	Number of Deratization Certificates Issued					Number of Deratization Exemption Certificates Issued	Total Certificates Issued
	After Fumigation with			After Trapping, Poisoning, etc.	Total		
	HC.*n*	Sulphur	HC.*n* and Sulphur				
24	11	...	...	...	11	13	24

VI.—HYGIENE OF CREWS' SPACES.

TABLE J

Classification of Nuisances.

Nationality of Vessel	Number Inspected during 1944	Defect of Original Construction	Structural Defects through wear and tear	Dirt; Vermin and other conditions prejudicial to health
British - -	1527	18	25	440
Other Nationalities -	290	10	14	155

VII.—FOOD INSPECTION.

During the year, 3 tons. 10 cwt. 3 qrs. 24 lb. of unsound foodstuffs were seized, and destroyed or disposed of otherwise than for the food of man.

Sanitary Report

for the Year

SUMMARY OF INSPECTIONS.

Houses, Factories, Outworkers' Premises, Shops, Schools, Common Lodging Houses, Milkshops, Piggeries, Stabling Yards, Tipping Grounds, Offensive Trades, etc. ...	122,642
Drain Tests	420
Nuisances discovered and complained of	50,554
Sanitary improvements carried out	18,500

May, 1945.

To The Commissioners appointed by the Ministry of Home Affairs to exercise and perform the powers and duties of the Tuberculosis Committee of the County Borough of Belfast.

Sirs,

I have the honour to present to you the Annual Reports on the work of the Tuberculosis Institutes, the Municipal Sanatorium, Whiteabbey, and the Municipal Hospital for Children, Greenisland, for the year 1944.

I have the honour to remain,

Your obedient servant,

CHAS. S. THOMSON,
Medical Superintendent Officer of Health.

Report of the Chief Tuberculosis Officer

SUBMITTED TO

The Medical Superintendent Officer of Health

FOR

The Commissioners for the Belfast Corporation Tuberculosis Department

HENRY DIAMOND, ESQ., M.A., O.B.E.
EDWARD ARMSTRONG, ESQ., M.D., B.Sc., D.P.H.

Dear Sir,

The report of the Senior Tuberculosis Officer, Dr. James Shaw, records a further increase in the work of the Tuberculosis Institute during the past year. The number of new cases examined, 3,399, constitutes a new record. The number of Artificial Pneumothorax refills at the Central Tuberculosis Institute has increased from 1,596 in 1943 to 2,372 during 1944. During the year the branch Dispensary at Albertbridge Road was closed, and this has resulted in a great shortage of accommodation at the Central Tuberculosis Institute. Plans are being prepared for the enlargement and modernisation of this building.

Deaths from tuberculosis in Belfast showed a decrease during 1944 as compared with the previous year.

There are several noteworthy developments to record, including the provision of Treatment Allowances and the inauguration of Mass Radiography.

The payment of Treatment Allowances came into operation in July, 1944, and has already proved of immense benefit to many patients who have to stop work on account of tuberculosis ; at present the allowances are limited to hopeful cases, and it would be a great advance if they were payable to all patients who have been advised to stop their work because of tuberculosis. No doubt the provision of these Allowances is one reason why the waiting-list for the Sanatorium has continued to increase during the year.

The Government of Northern Ireland has allotted a Mass Radiography Unit to the Belfast Corporation. The Medical Director, Dr. J. Norris Whyte, has been appointed and a Team has been trained in London. It is expected that the Unit will begin to operate during the summer of 1945. Mass Radiography is one more weapon in the campaign against tuberculosis, which will detect many unsuspected cases of active disease.

The Municipal Hospital for Children, Greenisland, continues to do splendid work in the treatment of Belfast children suffering from tuberculosis of bones and joints. This work is still carried out under great difficulty owing to the unsuitable character of the present accommodation.

The beds at the Municipal Sanatorium, Whiteabbey, have remained full throughout the year, and, as already mentioned, the waiting-list has increased further. Again I wish to draw your attention to this long waiting-list, the most serious obstacle to further advances in the campaign for the prevention of tuberculosis.

Yours faithfully,

B. R. CLARKE,
Chief Tuberculosis Officer.

Report of the Senior Tuberculosis Officer

on the work of

The Tuberculosis Institutes

For the Year ended 31st December, 1944

To the Chief Tuberculosis Officer.

Dear Sir,

I have pleasure in presenting for your information my annual report on the work of the Institutes for the year ended 31st December, 1944 — the twenty-ninth since the scheme of the Belfast Corporation for the prevention and treatment of tuberculosis was inaugurated in April, 1914.

During the year we examined 3,399 *new* patients—the largest number of new patients examined in any year since the commencement of our work.

NEW EXAMINATIONS.

TABLE I

Shows the number of persons *examined for the first time,* in each of the years indicated, without regard to age, sex, or diagnosis.

Year Ended	No. of Examinations
31st December, 1941 - - -	1765
31st December, 1942 - - -	2822
31st December, 1943 - - -	3290
31st December, 1944 - -	3399

(The number of primary examinations made from the date of the opening of the Institutes on the 1st April, 1914, was 63,400).

TABLE II

Shows the diagnostic result of examination of new patients during the years indicated.

Year Ended	Tuberculous	Primary T.B. Complex	Non-Tuberculous	Diagnosis Not Completed	Total
31/12/41	501	160	919	185	1765
31/12/42	627	276	1671	248	2822
31/12/43	628	250	2151	261	3290
31/12/44	762	186	2202	249	3399
Percentages for Year ended 31/12/44	22.4%	5.5%	64.8%	7.3%	100%

CONTACTS.

TABLE III

Shows the number and result of examination of Contacts as set out hereunder.

	Tuberculous	Primary T.B. Complex	Non-Tuberculous	Diagnosis Not Completed	TOTAL
No. - -	18	73	351	28	470
Percentage -	3.8%	15.5%	74.7%	6%	100%

Of the new patients examined during the year, **2,929** were notified as suffering, or suspected to be suffering, from tuberculosis, and **470**, as shown above, were "contacts." Contacts are examined in exactly the same way as new patients : clinical examination, X-ray, and, in the case of a child, tuberculin test. Many of the new patients examined were actually contacts of tuberculous patients, some of whom had been advised to attend at the Institutes for examination, but had preferred to consult their own doctors first and consequently were notified. For purposes of official returns, however, it has been necessary to regard new patients and "contacts" as mutually exclusive.

FORMS OF TUBERCULOSIS.

TABLE IV

Shows the numbers and sex of the patients found to be suffering from the different forms of Tuberculosis.

YEAR ENDED	Pulmonary		Glandular		Osseous		Abdominal		Other Forms		TOTAL	
	M	F	M	F	M	F	M	F	M	F	M	F
31/12/41	271	165	13	10	7	5	8	13	7	2	306	195
31/12/42	276	266	14	17	14	14	8	13	2	3	314	313
31/12/43	300	261	11	15	7	10	12	7	1	4	330	298
31/12/44	348	321	10	12	17	9	14	15	7	9	396	366

RE-ATTENDANCES OF PATIENTS.

The number of re-attendances of "old" patients for examination and treatment at the Institutes during the year was **20,589**, as compared with **28,422** in **1943**. **129** patients unable to attend at the Institutes for examination were re-examined in their homes, and **76** were re-examined in the Belfast City Hospital by the medical staff of the Institutes.

RE-EXAMINATION OF PATIENTS ON DOMICILIARY AND PANEL TREATMENT.

TABLE V

Shows the condition of Domiciliary (non-insured) and Panel (insured) patients re-examined by the medical staff of the Institutes during the past four years.

<table>
<tr><th>YEAR</th><th>Discharged Recovered</th><th>Disease Arrested</th><th>Disease Quiescent</th><th>Disease Not Arrested</th><th>TOTAL</th></tr>
<tr><td>1941</td><td colspan="2">50</td><td>76</td><td>480</td><td>606</td></tr>
<tr><td>1942</td><td colspan="2">63</td><td>101</td><td>595</td><td>759</td></tr>
<tr><td>1943</td><td colspan="2">48</td><td>107</td><td>803</td><td>958</td></tr>
<tr><td>1944</td><td>51</td><td>58</td><td>89</td><td>512</td><td>710</td></tr>
</table>

These special re-examinations of patients on treatment are exclusive of repeated re-examinations of "new" patients for the purpose of establishment of diagnosis ; and are also exclusive of routine re-examinations of Institute patients.

PATIENTS ON THE VARIOUS FORMS OF TREATMENT.

TABLE VI

Shows the numbers of *definitely tuberculous* patients on the different forms of treatment at the 31st December, 1944.

Institute	Domiciliary		Institutional			Total
	Insured	Non-Insured	Sanatorium	Children's Hospital	Bel. City Hospital	
1150	2449		323	44	47	4013

The above figures are exclusive of 249 patients not definitely diagnosed at the end of the year (but under observation on one or other form of treatment), and also of 485 cases of Primary T.B. Complex in children who are mainly on Institute treatment and observation.

The total *definitely tuberculous* patients *treated* during the year numbered 3,994.

During the year 1944—

8,165 X-ray films were taken and screenings carried out as required.
1,379 Light Treatments were given by Ultra-violet or Infra-red lamps.
1,838 specimens of sputum were examined for tubercle bacilli, and, where indicated, cultures were grown.
804 Tuberculin Tests (mainly P.P.D.) were done. The total number of children tested by this method to the end of the year 1944 was 9,381.
2,372 Artificial Pneumothorax Refills were given.

TABLE VII

NEW CASES IN AGE PERIODS AND SEX.

Age-Periods	All Forms of Tuberculosis	
	Males	Females
0— 4 inclusive - -	9	5
5— 9 „ - -	10	11
10—14 „ - -	20	20
15—19 „ - -	46	74
20—24 „ - -	75	86
25—34 „ - -	92	106
35—44 „ - -	52	39
45—54 „ - -	52	14
55—64 „ - -	34	9
65 and upwards - -	6	2
Totals - -	396	366

TABLE VIII

DEATHS IN AGE PERIODS AND SEX.

Age-Periods	Pulmonary (including Miliary)		Non-Pulmonary	
	Males	Females	Males	Females
0— 4 inclusive - -	7	2	9	19
5— 9 „ - -	—	—	3	10
10—14 „ - -	4	6	1	3
15—19 „ - -	9	16	7	7
20—24 „ - -	18	31	2	3
25—34 „ - -	32	54	4	6
35—44 „ - -	36	24	1	3
45—54 „ - -	41	14	3	2
55—64 „ - -	29	13	—	1
65 and upwards - -	7	11	1	4
Totals - -	183	171	31	58

DEATHS AND DEATH RATES.

Pulmonary Tuberculosis.—The number of deaths in Belfast in 1944 according to the return of the Registrar General for Northern Ireland was 354, as compared with 367 in the year 1943, and with 836 in the year 1914. The *death-rate* from pulmonary tuberculosis was 81 per 100,000.

Non-pulmonary Tuberculosis.—The number of deaths from the non-pulmonary forms of tuberculosis in Belfast in 1944 was 89, as compared with 117 in 1943, and with 290 in the year 1914. The *death-rate* from non-pulmonary tuberculosis in 1944 was 20 per 100,000.

TABLE IX

Shows the declining trend of the death-rate from tuberculosis in Belfast during the last thirty years.

Year	No. of Deaths		Death Rate per 100,000		Comparison of Rate with 1914 as 100	
	Pul.	Non-Pul.	Pul.	Non-Pul.	Pul.	Non-Pul.
1914 - - -	836	290	209	73	100	100
1915 - - -	770	286	191	71	91	97
1916 - - -	792	259	203	66	97	90
1917 - - -	912	289	232	73	111	100
1918 - - -	992	265	252	67	121	92
1919 - - -	867	261	216	65	103	89
1920 - - -	783	225	189	54	90	74
1921 - - -	624	163	148	39	71	53
1922 - - -	534	158	126	37	60	51
1923 - - -	528	159	123	37	59	51
1924 - - -	615	166	142	38	68	52
1925 - - -	571	202	130	46	62	63
1926 - - -	582	141	140	34	67	47
1927 - - -	509	152	123	36	58	49
1928 - - -	493	147	119	35	57	48
1929 - - -	475	122	114	29	54	40
1930 - - -	469	129	113	31	54	42
1931 - - -	438	124	105	30	50	41
1932 - - -	427	128	103	31	49	42
1933 - - -	450	159	108	38	52	52
1934 - - -	448	122	108	29	52	40
1935 - - -	401	108	96	26	46	36
1936 - - -	406	94	97	22	46	30
1937 - - -	414	96	94	22	45	30
1938 - - -	348	107	78	24	37	33
1939 - - -	365	71	83	16	39	22
1940 - - -	412	94	94	21	45	28
1941 - - -	426	98	97	22	46	30
1942 - - -	369	79	84	18	40	25
1943 - - -	367	117	84	27	40	37
1944 - - -	354	89	81	20	40	27

TREATMENT ALLOWANCES.

The scheme for the provision of allowances to tuberculous patients giving up work to undergo treatment was brought into operation at the 1st July, 1944, in identical terms with those of Memorandum 266T. of the English Ministry of Health. From the 1st July, 1944, until the 31st December, 1944, the number of applications for the Allowance was 463. 285 applications were allowed, 41 deferred, and 137 were not eligible within the terms of the Memorandum. It is hoped that after the war it may be possible to extend the scheme to all patients suffering from tuberculosis—especially to chronic and advanced cases.

I am,

Yours faithfully,

JAMES SHAW,
Senior Tuberculosis Officer.

The Report of the Medical Superintendent

on the working of

The Belfast Municipal Sanatorium

For the Year ended 31st December, 1944

I have the honour to present the twenty-first Annual Report upon the working and progress of this Institution.

CAPACITY.—The maximum number of beds in the Sanatorium is 335. The distribution of the accommodation is as follows :—

TABLE I

	Pulmonary Tuberculosis Beds	Surgical Beds	TOTAL
Males	169	10	179
Females	120	6	126
Children	30	—	30
TOTAL	319	16	335

PERSONNEL

General Staff:—

Medical Superintendent	1
Assistant Medical Officers	4
Visiting Thoracic Surgeon	1
Visiting Orthopædic Surgeon	1
Visiting Dental Surgeon	1
Dispenser and Statistical Clerk	1
Radiographer	1
Laboratory Technician	1
Laboratory Assistant	1
Chaplains	4
School Mistresses	2

Clerical Staff:—

Administrative Assistant	1
Senior Clerk	1
Clerks	4

Nursing Staff—

Matron and Assistant Matron	2
Home Sister	1
Sisters	7
Theatre Sister	1
Staff Nurses	11
T.A. or Assistant Nurses	6
Probationer Nurses	32

Domestic Staff:—

Cooks	2
Assistant Cooks	2
Maids	28

Miscellaneous:—

Works Superintendent	1
Engineer	1
Gardener	1
Storekeeper	1
Others	18

Total Nursing Staff	60
Nursing Staff per ten beds	1.79

TABLE II

Annual Return shewing the Extent of Treatment from 1st January, 1944, till 31st December, 1944. (Comparative figures for the year 1943 are shown in brackets).

WHITEABBEY	In Institution 31/12/43	Admitted During 1944	Discharged During 1944	Died During 1944	In Institution 31/12/44
No. of Patients	272 (226)	475 (461)	384 (374)	46 (41)	317 (272)

TABLE III

Annual Return shewing the Classification of patients admitted during 1944.

TYPE OF CASE	Men	Women	Children	TOTAL
Pulmonary Tuberculosis	197 (200)	191 (184)	52 (50)	440 (434)
Surgical Tuberculosis	3 (6)	3 (5)	7 (10)	13 (21)
Non-tuberculous	4 (3)	2 (1)	1 (1)	7 (5)
Unclassified	2 (—)	— (1)	— (—)	2 (1)
Re-admissions	3 (—)	8 (—)	2 (—)	13 (—)
TOTAL	209 (209)	204 (191)	62 (61)	475 (461)

TABLE IV

Annual Return shewing the Classification of patients discharged during 1944 (excluding those indicated in Table No. V).

TYPE OF CASE	Men	Women	Children	TOTAL
Pulmonary Tuberculosis	156 (145)	157 (125)	45 (53)	358 (323)
Non-pulmonary Tuberculosis	4 (6)	1 (8)	3 (12)	8 (26)
TOTAL	160 (151)	158 (133)	48 (65)	366 (349)

TABLE V

Annual Return indicating patients discharged during 1944, but not included in treatment survey.

	Men	Women	Children	TOTAL
In residence less than one month (excluding deaths and redischarges)	9 (15)	23 (16)	7 (4)	39 (35)
Redischarges	— (5)	1 (3)	1 (—)	2 (8)
Non-tuberculous	5 (4)	3 (1)	1 (1)	9 (6)
Temporary discharges of patients still in residence	2 (3)	3 (8)	2 (1)	7 (12)
Temporary discharges of patients not included above	2 (1)	3 (1)	— (3)	5 (5)
Doubtful	1 (—)	1 (—)	— (—)	2 (—)
TOTAL	19 (28)	34 (29)	11 (9)	64 (66)

TABLE VI

Annual Return indicating the duration of residence of patients in the Sanatorium during the year 1944.

PATIENTS DISCHARGED :

(1)	Suffering from Pulmonary Tuberculosis	238.2 days
(2)	Suffering from Non-Pulmonary Tuberculosis	376.5 ,,
(3)	Suffering from P.T.C.	202.4 ,,

PATIENTS DIED :

(1)	Suffering from Pulmonary Tuberculosis	252.8 ,,
(2)	Suffering from Non-Pulmonary Tuberculosis	154.0 ,,

TABLE VII

Analysis of patients with Pulmonary Tuberculosis discharged during 1944.

		DURATION OF RESIDENCE IN SANATORIUM															
Classification upon Admission	Condition upon Discharge	Under 3 Months			3—6 Months			6—12 Months			Over 1 Year			TOTALS			TOTAL
		M	W	C	M	W	C	M	W	C	M	W	C	M	W	C	
Class T.B. Minus	Quiescent	4	5	4	11	7	19	3	2	6	1	1	2	19	15	31	65
	Improved	3	5	—	5	13	—	1	3	4	1	5	3	10	26	7	43
	N.M. Imp.	1	3	1	1	—	—	—	—	1	2	—	—	4	3	2	9
	Died	1	—	1	—	—	—	—	—	—	—	—	—	1	—	1	2
	TOTAL	9	13	6	17	20	19	4	5	11	4	6	5	34	44	41	119
Class T.B. Plus Group 1	Quiescent	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	1
	Improved	1	—	—	—	—	—	—	1	—	—	—	—	1	1	—	2
	N.M. Imp.	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	1
	Died	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	TOTAL	1	1	—	—	—	—	—	2	—	—	—	—	1	3	—	4
Class T.B. Plus Group 2	Quiescent	1	—	—	4	1	—	3	5	—	2	1	—	10	7	—	17
	Improved	—	2	—	3	1	—	5	2	—	3	2	—	11	7	—	18
	N.M. Imp.	3	1	—	1	1	—	3	1	—	—	—	—	7	3	—	10
	Died	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	1
	TOTAL	4	3	—	8	3	—	11	9	—	5	3	—	28	18	—	46
Class T.B. Plus Group 3	Quiescent	—	—	—	2	—	—	3	3	—	5	—	1	10	3	1	14
	Improved	3	1	—	4	3	—	8	8	—	12	18	—	27	30	—	57
	N.M. Imp.	16	17	—	7	13	1	3	7	—	6	5	1	32	42	2	76
	Died	7	9	1	7	3	—	3	2	—	7	3	—	24	17	1	42
	TOTAL	26	27	1	20	19	1	17	20	—	30	26	2	93	92	4	189
	GRAND TOTAL	40	44	7	45	42	20	32	36	11	39	35	7	156	157	45	358

N.M. Imp. = No Marked Improvement.

SURGICAL SECTION.

TABLE VIII

Patients discharged during 1944. The following is an analysis of these cases.

		DURATION OF RESIDENCE IN SANATORIUM														
Type of Disease upon Admission	Condition upon Discharge	Under 3 Months			3—6 Months			6—12 Months			Over 1 Year			TOTALS			TOTAL
		M	W	C	M	W	C	M	W	C	M	W	C	M	W	C	
Osseous	Quiescent	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	1
	Improved	—	—	—	—	—	—	—	—	—	2	—	—	2	—	—	2
	N.M. Imp.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Died	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	TOTAL	—	—	—	—	—	—	—	—	—	3	—	—	3	—	—	3
Abdominal	Quiescent	—	—	—	—	—	—	—	—	1	—	—	2	—	—	3	3
	Improved	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	N.M. Imp.	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	1
	Died	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	TOTAL	—	1	—	—	—	—	—	—	1	—	—	2	—	1	3	4
Other Organs	Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Improved	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
	N.M. Imp.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Died	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	TOTAL	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
Glandular	Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Improved	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	N.M. Imp.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Died	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	TOTAL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	GRAND TOTAL	1	1	—	—	—	—	—	—	1	3	—	2	4	1	3	8

COMPLICATIONS.

The following complications of pulmonary tuberculosis were noted during residence in hospital.

Other forms of Tuberculosis—

Abdomen	4	Larynx	16
Cervical glands	6	Meninges	3
Cold abscess—thigh	1	Osseous tissues	4
Elbow-joint	1	Peritoneum	1
Empyema	4	Pharynx	1
Epididymis	4	Rib	1
Intestines	12	Spine	3
Ischio-rectal fossa	1	Tendons	1
Kidney	7		

Other Diseases—

Abscess—alveolar	1	Asthma	1
Abscess—groin	1	Boils	1
Albuminuria	1	Bronchiectasis	1
Amyloid disease	4	Bronchitis	1
Anæmia	2	Congenital dislocation of both hips	1
Arthritis	1	Congenital heart disease	2
Asbestosis	1	Conjunctivitis	1

Corneal ulcer	1
Cyst—sebaceous	1
Deafness	2
Dextro-cardia	1
Diabetes	1
Emphysema	6
Fractured scaphoid	1
Glossitis	1
Granulating eye-socket	1
Hernia	3
Impetigo	2
Irritation of the sciatic nerve with contracture to knee and toes	1
Lumbago	1
Lymphadenoma	1
Mania	1
Menorrhagia	1
Mitral stenosis	1
Mitral reflux	2
Mumps	1
Nephritis	1
Neurasthenia	2
Otitis media	5
Paralysis—infantile	1
Paralysis—L. vocal cord	1
Paresis	1
Paronychia	1
Pleural effusion	2
Phimosis	1
Pneumonia—broncho	1
Pneumonitis	1
Pregnancy	7
Psychoneurosis	1
Quinsy	1
Raynaud's disease	1
Recent confinement	13
Renal calculus	1
Rheumatism	1
Scabies	3
Spastic diplegia	1
Squint	1
Thrombosis	1

TABLE IX

	DURATION OF RESIDENCE PRIOR TO DEATH							
	Days			Months				
	1—10	11—20	21—31	1—3	3—6	6—12	Over 12	TOTAL
Number of Cases	3	1	5	11	8	6	11	45

1 death non-tuberculous, 3—6 months.

TABLE X

Classification of Patients in residence 28 days or less.

	Men	Women	Children	TOTAL
Minus	3	10	5	18
Group 1 Plus	—	—	—	—
Group 2 Plus	2	1	—	3
Group 3 Plus	6	16	1	23
Osseous	—	—	—	—
Abdominal	—	—	2	2
Glandular	—	—	—	—
Other Organs	—	—	—	—
Doubtful	1	—	—	1
Non-tuberculous	2	1	1	4
Unclassified	—	—	—	—
TOTAL	14	28	9	51

TABLE XI

Cause of discharge of patients in previous Table.

Against Medical Advice	Recommended	Transferred	Own Request	Death	TOTAL
22	4	—	17	8	51

TABLE XII

Artificial Pneumothorax treatment. Results on discharge 1944.

	No. of Cases	Sputum on Admission		Sputum on Discharge		Internal Pneu-molysis	Phrenic Operation	Result					
		Pos.	Neg.	Pos.	Neg.			Q.	Imp.	I.S.Q.	Worse	Died	TOTAL
Collapse Satisfactory -	33												
Hilar - -	25	22	3	7	18	17	1	13	12	—	—	—	25
Mediastinal - -	5	5	—	—	5	5	—	1	4	—	—	—	5
Partial - -	3	2	1	—	3	—	—	3	—	—	—	—	3
Collapse Unsatisfactory -	30	28	2	17	13	5	5	3	18	5	1	3	30
No Collapse - -	17	15	2	12	5	—	3	3	5	6	2	1	17
TOTAL - -	80	72	8	36	44	27	9	23	39	11	3	4	80

OPERATIVE TREATMENT.

A.P. Induction - - -	90	Phrenic operation - - -	22
A.P. Induction attempted - -	22	Thoracoplasty - - -	28
A.P. Refills - - -	3416	Thoracoscopy - - -	5
Bronchoscopy - - -	1	Chest aspiration - - -	113
Lipiodol - - -	8	Pneumo peritoneum - -	1
Pneumolysis - - -	56		

TABLE XIII

Table shewing the average number of patients in residence per day for the past ten years.

Financial Year ending March	Number
1936	259.83
1937	243.78
1938	237.90
1939	231.39
1940	235.89
1941	232.39
1942	230.78
1943	246.66
1944	268.33
1945	303.67

REPORT OF THE WORK OF THE EAR, NOSE, AND THROAT DEPARTMENT.

By T. Kennedy Hunter, M.B., F.R.C.S., D.L.O.

The work of the Department again shows an increase over the previous year, 78 more examinations were carried out, or a total of 211. 67 new cases were examined.

The number of cases of laryngeal tuberculosis examined was one more than the previous year, namely, 18. Of these, 11 were males and 7 were females. The youngest was 19 years of age and the oldest 47. The average age was 26 years. Of these cases, 2 were discharged healed, 6 improved, 3 died, and the others showed little change.

The sites affected in the order of frequency were : true cords, inter-arytenoid space, arytenoids, epiglottis, false cords, and aryteno-epiglottic folds.

Two cases of tuberculosis of the middle ear were discovered. The number of non-tuberculous diseases of the ear examined was almost double that of the previous year.

One operation for dissection of tonsils was carried out under local anæsthesia.

REPORT OF THE X-RAY DEPARTMENT, 1944.

X-Ray Photographs—	
Pulmonary	1,247
Surgical	144
Barium Meal Examinations	14
Lipiodol	8
Renal	5
Total	1,418
Screen Examinations	1,907

Kromayer Lamp—7 patients had 86 treatments.

REPORT OF THE VISITING DENTAL SURGEON

For the Year 1944 (abridged).

	Sanatorium	Children's Hospital
Extractions	283	17
Examinations and Dressings	278	80
Fillings	48	4
Scalings	21	3

REPORT OF THE PATHOLOGICAL LABORATORY, 1944.

Total number of investigations - - - 7,229

Blood—	
Complete counts	19
Congo red absorption tests	10
Culture	1
Grouping	33
Sedimentation rates	2,881
Serum protein	12
Sugar	25
Transfusions	28
Urea	8
Sputum—	
Direct examinations	2,117
Gasolene concentrations	69
Culture	1,256
Asbestosis	2
Malignant cells	1
Spirilla	6
Laryngeal reflex	42

Pleural Fluids—	
Bacteriological	48
Cytological	37
Cerebro-spinal Fluids—	
Complete investigation	9
Urines—	
Chemical examination	80
Bacteriological examination	80
Bacteriological examinations of pus	109
Post-mortem examinations	9
Histological examinations	188
Vitamin C estimations in urine	106
Complete water examinations	1
Milk—	
Phosphatase and bacteriological	47
Fractional test meal	1
Preparation of vaccines	4

During the year 1944 the number of patients on the waiting-list showed a further increase from 98 in January, 1944, to 216 in December, 1944.

In September, 1944, the second Emergency Hospital building was opened for patients, and has remained fully occupied. This provided forty additional beds, and it has resulted in the year ending 31st March, 1945, that the average number of patients in residence was 303.67, as compared with 268.33 in the previous year.

A further increase is noted in the average duration of residence, a tendency which is shown in the returns of most tuberculosis hospitals at the present time. The number of short-stay cases remains comparatively low, although it is regrettable that twenty-two patients left hospital against medical advice after a stay of less than twenty-eight days. The failure to remain in hospital in these cases was usually due to financial problems or to the difficulty of providing care for young children in the home. Undoubtedly the new Treatment Allowances have been most helpful to those patients who are eligible to receive them.

The statistical enquiry into the after-history of patients has been continued, and a special filing system has now been installed to facilitate this work. After the lapse of a few years this enquiry should yield valuable medical information, particularly as to the late results of treatment.

The medical and surgical work of the hospital has increased during the year. The number of patients discharged after artificial pneumothorax was 80, as compared with 68 discharged in 1943 and 49 discharged in 1942. The results of this treatment continue to be highly satisfactory, particularly as regards the conversion of sputum from positive to negative. Reports from many parts of the world have shown that a successful pneumothorax restores the working capacity of the patient and often results in a permanent cure of the disease. Twenty-eight thoracoplasty operations were performed in the hospital during the year with satisfactory results.

During the year the Commissioners have continued the policy of improving the equipment of the Institution, paying special attention to medical, surgical, and kitchen equipment. The following additional items of equipment were purchased during the year :—

Thoracoplasty Instruments.
Anatomical Lay Figure.
Food Mixer.
Potato Chipper.
Fish Frier.
Insulated Food Containers.
Potato and Vegetable Steamer.
Animal House.
Fuel Bins.
Lockers—Women's Pavilion.
Planting—3,500 trees.

The painting and pointing work included the interior decoration of the main hospital building and the completion of the pointing of this building.

Through the kindness of the Red Cross and St. John Association, voluntary instruction in handicraft work is now being provided for the Service patients. This work has been made possible by the generous grant of materials for handicraft work and by the kindness of the voluntary worker, Mrs. Crawford Browne. It is hoped to extend these facilities to all patients as soon as possible.

The Patients' Canteen continues to be supported well and the profits have been expended on recreation and entertainment facilities.

Instruction for the certificate of the Tuberculosis Association was continued during the year and three members of the nursing staff qualified for the certificate. The teaching of student nurses has been continued, nine student nurses obtaining the certificate by passing Parts 1 and 2 of the examination and six more student nurses passing Part 1 of the examination.

The nursing work of the hospital remains arduous, as the number of seriously ill patients is high and the number of patients on active treatment continues to increase. The wards have remained full throughout the year and the work of the nursing staff continues to be worthy of the highest praise. The shortage of beds, which continues to hinder the work of the hospital by causing delay in the admission of patients, is the greatest obstacle to further advances in treatment.

The work of the chaplains has again earned the deep appreciation of patients and staff alike. The religious services have been well attended and sick patients have been visited regularly in the wards. The religious instruction of the children has also been carried on throughout the year.

The enlargement of the hospital and the steady extension of surgical work in war-time have presented special problems, which have only been solved by the constant exertions of the authorities and the splendid work of the staff of the hospital.

Our thanks are due to the Rev. W. B. McMurray, the Rev. Father McFerran, and to the Excelsior Choir, who arranged enjoyable concerts, and also to the artistes who entertained the patients.

The following gifts were received during the year :—
British Legion—Provisions, Books, etc.
Duneane Girls' Auxiliary, Randalstown Girls' Auxiliary—Subscriptions.
Ulster Gift Fund—Dressing Gowns, etc.
Dr. Armstrong—Books.
Mrs. Green—Books and Toys.
Belfast Rural District Council—Books and Magazines.
W.V.S.—Sweetened Chocolate.
Mrs. Baillie—Scrap Books for Children.
Belfast Public Library—Books.
Whiteabbey Presbyterian Church—Toys, Books, etc.
St. Katherine's Church—Toys and Books.
Messrs. Robt. Watson & Co. Ltd.
Rev. F. Maguire.
Very Rev. A. J. Kennedy
Rev. D. McFerran.
Rev. A. Haughey. } Subscriptions.
Rev. P. McGinn.
Mr. McGrath.
Messrs. White, Tomkins & Courage.

Yours faithfully,

B. R. CLARKE,
Medical Superintendent.

MUNICIPAL CHILDREN'S HOSPITAL
Greenisland

The Report of the Visiting Surgeon
For the Year ended 31st December, 1944

To the Chief Tuberculosis Officer.

Dear Dr. Clarke,

I beg to submit my report on the clinical work of the hospital for the year 1944.

Twelve patients were discharged with disease arrested, one was removed by the parents with disease arrested, but not yet ambulant. One case of spinal caries was removed, unchanged, by the parents two weeks after admission. Eighteen patients were admitted and forty-four remained in hospital on the 1st January, 1945.

There were no deaths and the incidence of infectious disease was low. There were no cases of diphtheria, presumably because immunisation was carried out. Five cases of chicken-pox and one of mumps occurred.

ADMISSIONS AND DISCHARGES DURING 1944.

Remained in hospital on 1st January, 1944	40
Admissions	18
Total	58
Discharged	12
Removed by parents	2
Total	14
Remained in hospital on 1st January, 1945	44

CONDITIONS FOR WHICH PATIENTS WERE ADMITTED.

Spinal caries	7
Hip-joint disease	1
Tuberculosis of knee-joint	4
Rickets and suspected tuberculosis of knee	1
Tuberculosis of tarsus	3
Tuberculosis of elbow	1
Caries rib	1
Total	18

DISCHARGES DURING 1944.

Spinal caries—	
Disease arrested	3
Removed by mother, C.M.A.	1
Hip-joint Disease—	
Tuberculosis, disease arrested	2
Perthe's disease, disease arrested	1

Knee Joint—	
Chronic swelling, probably due to rickets, disease arrested ...	1
Tuberculosis of Ankle-joint—	
Disease arrested	1
Tuberculosis of Hand Bones—	
Disease arrested	2
Cervical Adenitis—	
Disease quiescent	1
Caries Rib—	
Disease arrested	1
Periostitis Femur—	
Disease arrested	1

Endeavour is made to keep in touch with discharged patients, and I find it more convenient to carry this out at the Royal Victoria Hospital.

Patients are requested to attend at three-monthly intervals but they do not all comply. I had, however, fifty-two consultations during the year.

MUNICIPAL CHILDREN'S HOSPITAL, Greenisland

Details of patients discharged during 1944.

REGISTER NUMBER	AGE ON ADMISSION	SEX	NUMBER OF DAYS TREATED	CONDITION ON ADMISSION	CAUSE OF DISCHARGE	CONDITION ON DISCHARGE
349, 481, 556, and 573	5 years	F	(1) 1,604 (2) 1,087 (3) 246 (4) 215	Caries 10th and 11th thoracic vertebræ, with angular kyphos.	(1) Diphtheria. (2) Scarlet fever. (3) For tonsillectomy. (4) Disease arrested.	A stout, healthy girl, short in stature, but not deformed.
441 and 526	3 7/12 years	F	(1) 1,013 (2) 937	Caries 4th and 5th lumbar vertebræ, with psoas abscess.	(1) Chicken-pox. (2) Disease arrested.	A healthy child. Prominent lumbar spine, but shows no deformity.
516	3 years	M	1,133	Caries 4th and 5th lumbar vertebræ.	Removed by parents. Disease arrested.	In good health. Vertebræ consolidated, but had not been up.
590	15 years	F	15	Caries 3rd and 4th lumbar vertebræ.	Girl wanted home, and was removed by parents.	No change.
417 and 426	6 3/12 years	M	(1) 51 (2) 2,105	Very chronic left hip-joint disease. Loss of head of femur and enlarged acetabulum. Abscess and sinus.	(1) Scarlet fever. (2) Disease arrested.	In good health. 30 degrees mobility, but four-inch shortening.
260	3 years	M	4,920	Right hip-joint disease.	Disease arrested.	Hip stiff in abduction, with two-inch real shortening, due to enlargement of acetabulum. One-inch apparent shortening. Now a healthy boy.
545	8 years	F	638	Perthe's disease right hip.	Disease arrested.	Full mobility. No disability. Head of femur rounded.

Details of patients discharged during 1944—*continued.*

REGISTER NUMBER	AGE ON ADMISSION	SEX	NUMBER OF DAYS TREATED	CONDITION ON ADMISSION	CAUSE OF DISCHARGE	CONDITION ON DISCHARGE
582	2 years	M	154	Chronic swelling left knee, probably not tuberculosis. Rickets.	Disease arrested.	In good health.
527	11 4/12 years	F	828	Synoviæ tuberculosis left ankle, with sinus.	Disease arrested.	Ankle healed. No bone necrosis.
546	2 years	F	556	Caries 2nd left metacarpal bone and rickets.	Disease arrested.	Child quite well.
563	2 years	M	537	Caries proximal phalanx third finger and fifth metacarpal right hand, with sinus formation.	Disease arrested.	A healthy child.
569	10 years	M	311	Tuberculosis left tonsillar lymph-gland, with sinus.	Disease quiescent.	Healed. Health good.
578	12 years	F	137	Caries rib. Cold abscess at lower angle of right scapular.	Disease arrested.	Abscess absorbed.
549 and 565	7 2/12 years	M	(1) 129 (2) 478	Chronic periostitis upper end of right femur. Genu valgum.	(1) Scarlet fever. (2) Disease arrested.	Knock-knee corrected. Periostitis, of doubtful origin, quiescent.

Infectious Diseases Occurring During 1944.

Chicken-pox	5
Mumps	1

Other Complications.

Sore throats	15
Epistaxis	10
Otorrhœa	8
Diarrhœa	3
Diarrhœa with blood	4
Thread worms	1
Sepsis in fingers	8
Herpes	15
Styes	20
Phlyctenular ulcer	1
Corneal ulcer	1
Blepharitis	1
Purpura	1
Impetigo	4
Urticaria	1
Indeterminate rashes	8
Foreign body in ear	1
Foreign body in nose	1
Minor injuries, abrasions, and cuts	7
Burn, minor	1
Boils and pustules	22
Influenza attacks and colds	20

Conditions which occurred in Members of the Staff.

Diarrhœa	4
Vomiting	2
Colds	2
Sore throats	5
Otorrhœa	1
Finger sepsis	5
Styes	2
Scabies	2
Chicken-pox	1
Impetigo	1
Minor injuries	6

Minor Operations with Local Anæsthesia.

Circumcisions	2
Abscess drainage	2
Aspirations	3
Wound suture	1
Excision of wart	1

I am,

Your obedient servant,

H. P. MALCOLM,
Visiting Surgeon.

28*th March,* 1945.

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